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CORPORATION OF MADRAS.

DEC. 1927

(RIPON BUILDINGS)

ANNUAL REPORT

OF THE

[Health Officer]
Health Department.
of the City of Madras

FOR THE YEAR

1926.

MADRAS:
R. VENKATESHWAR & CO.,
Ananda Press.

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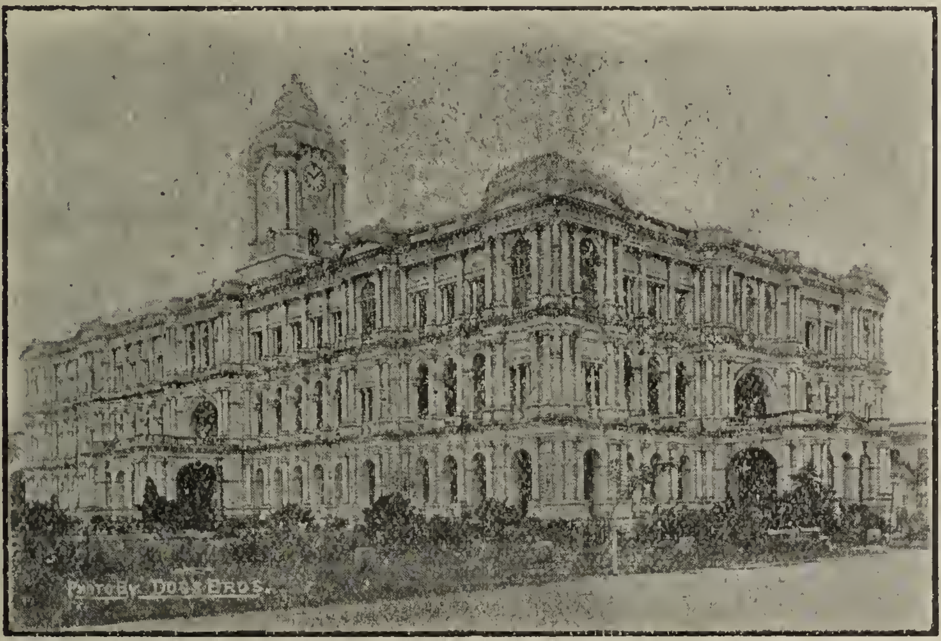

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To

THE COMMISSIONER,

Corporation of Madras, Madras.

Sir,

I have the honour to submit the Annual Report on the Health Administration of the city for the year 1926.

I took charge of the department on the 13th August 1926, when Rao Bahadur Dr. K. Raghavendra Rao, the permanent Health Officer left the department to take charge as the Assistant Director of Public Health.

I invite the attention of the Commissioner to some of the more important features of the vital statistics of the year. Although the year under report had been comparatively free from epidemics the crude death rate stands so high as 45 per mille. Deaths from Malaria was on the increase. 1,342 persons died of Malaria as against 1,298 in the previous year. Dysentry and Diarrhoea mortality figures show only slight improvements when compared with the figure of 1925. 3,867 persons died of Dysentery and Diarrhoea in 1926, as against 4,031 in 1925. Infantile mortality does not show any change whatever. So also the aggregate number of deaths from Pneumonia diseases of the Respiratory System and Tuberculosis of the Lungs. The exact figures are 6291 and 6228 for 1926 and 1925 respectively.

Death rate for Europeans, Anglo-Indians, Indian Christians, Hindus and Muhomadans are 19·4, 33·7, 33·2, 45:6 and 52·1 respectively.

The inference from the above figures is (1) The general mortality in the city is appalling. (2) The sickness and morbidity that prevail amongst the community are equally appalling. (3) We have not yet been able to provide those essential amenities which prolong life and diminish suffering in other cites of the world. (4) Misery and morbidity are seen in increasing measure as we go down the social scale.

The last point seems to be the key to the question of high mortality. It is poverty that accounts for this high mortality.

The age and sex constitution of the population does not favour a high mortality. But the acute poverty that prevails amongst the vast majority of the community, deprives the body of that nutrition so essential to resist diseases, and accounts for the low standard of living and insanitary environments.

To effect any lasting improvements money is needed. Unless the foundations are laid properly one cannot expect any success. All those figures mentioned above can be traced to one or other of the following:—

1. (1) Defective or insufficient supply of water.
2. (2) Defective drainage.
3. (3) Bad housing and incredible overcrowding, and
4. (4) Defective conservancy.

During the year under report a good deal of laboratory work has been done in connection with water supply. As a result of the daily examination of water the presence of the vibrios was detected the moment they appeared in the Red Hills Water. Immediate investigation was conducted and chlorination was started which had to be continued in view of the unsatisfactory arrangements for filtration. But any amount of vigilence and laboratory work cannot replace fundamental defects. The city's water supply has been defective both in regard to quantity and quality. So long as we do not give an abundant and wholesome supply of water to every householder we need not look for *any* reduction in the mortality from water-borne diseases. The cry for more taps is heard in most of the slum areas where the supply is still scanty. People living in well-to-do quarters where there are house service connections cannot realise the suffering of those poor people who have to resort to public taps for their daily supply. We have to concert measures immediately so as to ensure a liberal supply of water even making full allowance for the possible failure of monsoons.

The underground drainage should be extended to all slum areas. Even in sewered areas it is not unusual to find a number of cesspools It is extremely necessary to see not a drop of sullage water is allowed to stagnate outside the dwelling houses in sewered areas. The position of side drains in sewered areas has caused considerable controversy. The remedy is to have a separate scheme for surface drainage for the city. At present in areas where drains have been closed with the introduction of sewers, water stagnates after a shower, giving rise to an intolerable nuisance and soil pollution. Without adequate storm water drainage there will be the constant mosquito nuisance and foul smell. The practice of indiscriminately covering the large drains with Cuddapah slabs or masonry slabs has been the cause of so much nuisance. These drains easily get silted up, giving rise to stagnation of water and mosquito nuisance.

On the question of housing much has been said and written. Practically every one is agreed that the existing slums should be improved and more houses should be built to relieve overcrowding. Yet nothing tangible has been so far achieved owing to financial stringency. House to house inspection had been very vigorously pushed during the year under report and as many as 18,569 houses had been inspected.

If substantial results are to be expected there should be a bold and clear cut housing policy. It should be remembered that Madras City is far behind even most of the towns of the presidency in regard to development. The various schemes such as the Choolai Scheme, the Mambalam Scheme, etc., are still awaiting funds. What is really required is that we should take up this question so as to bring about a comprehensive development scheme for the entire city, a scheme, that will be based on a scientific as well as business point of view.

Conservancy—the removal and disposal of rubbish and human filth—has been a very difficult problem even in western countries and much more so is it the case in the east, especially in cities of vast dimensions like Madras, where there is still scope for further development. For many years to come, an efficient conservancy will be and ought to be our mainstay to preserve the health of the city at a satisfactory level. Slum areas and hutting grounds are springing up with rapid strides. Naturally in proportion to the gradual development of the city the staff and carts required for conserving the city have also to be increased year after year. This was not done for the past four or five years. The provision made in the budget all these years was not sufficient even to replace the unserviceable carts and dead bullocks. Bullocks which have become old and unserviceable year after year have not been replaced by equal number of new ones. The consequent undue strain brought to bear on the existing bullocks has led to their sufferings from sore-necks and to their being debilitated prematurely. It is of paramount importance to see that there will be always sufficient number of healthy bullocks for conservancy work. Carts and lorries that are engaged in the removal of rubbish and filth should always be maintained in a high degree of efficiency. The nightsoil cart system was abolished in certain areas, as stationing of these carts in the streets close to residences was abhorred by the people. In its place the system of removal of nightsoil by buckets and lorries was introduced. Under this system buckets are always stationed in certain places to enable the private scavengers to deposit the nightsoil in them, whenever they conserve the private latrines and thus prevent—their dumping into the street corners, dustbins and other objectionable places. If the buckets are removed and the cart system re-introduced there will be dumping of nightsoil in objectionable places as before, and there is no other dry method to advantageously take the place of this system. Water carriage system alone can completely eradicate the nuisance and until that is made possible all efforts should be made to minimise the nuisance. A beginning has been made to introduce more flushout latrines in the city. In factories, institutions, places of business, schools, colleges and hostels, flushout latrines are being insisted upon. It was also proposed to introduce flushout latrines in all the markets in the city. The question was however shelved by the Council. More and more flushout public latrines have to be built. The number of public latrines in the city is absolutely insufficient and unless this is increased street nuisance will continue. The present design of flushout latrines is a great improvement on the old fashioned seated or sanded latrines. But it has one serious defect, viz., there is no provision for ensuring privacy. A door should be provided for each compartment which can be bolted from within. If this is done, and if the scavenger attached to these places keeps them thoroughly clean, these latrines will be serviceable to all classes of people.

No permanent improvement can be effected without adequate supervision. The present number of inspectors is quite insufficient and their number has to be increased without any more delay. The posts of a Conservancy Officer and two Supervisors should be restored, for close supervision is everything in the management of labour. The two Assistant Health Officers are saddled with multifarious duties and additional duties cannot be reasonably expected of them without sacrificing efficiency. A competent motor mechanic with sufficient experience in the management of labour is also a great necessity for the lorry station. A wholetime staff of a few overseers and oiling gangs with a Malarial Officer is indispensable for malaria work.

To carry out the above we require money. But all preventive measures mean a large initial investment. There has been a remarkable change during very recent years and the public have become more and more critical. A policy of postponement will only mean more expenditure, more epidemics and greater loss of life. Sanitation has saved nations and made them prosperous and strong. The same road is open to us also. Epidemics can be more efficiently fought during the Budget Week than at any other time.

I have the honour to be,
Sir,
Your most obedient servant,
C. S. GOVINDA PILLAI,
M.B., Ch. B., D.P.H., (Edin.)
Health Officer.

VITAL STATISTICS.

Summary of Vital Statistics.

Area of the City	19,728 Acres.		
Population (Census of 1921)	526,911		
Population of Mambalam area	1,880		
Total Population	528,791		
Average Density	22·2 per acre		
Density of Division 10 to 15	91·1 „		
Inhabited houses (Census of 1921)	65,048		
Total births registered in 1926 excluding still-births.	22000	against	23070
Still Births	1105	against	1335
Illegitimate births	600	„	630
Birth rate per 1000 population	41·6	„	43·6
Total Deaths registered in 1926	23776	„	25000
Death rate per 1000 of population	45·0	„	47·3
Infantile mortality	6145	„	6431
Infantile mortality rate per 1000 live births	279·3	„	278·8
Death rate from infectious diseases per 1000 of population	18·6	„	19·2
Estimated population in the middle of the year 1926			533,123
Corrected birth rate			41·3
Corrected death rate			44·6
Percentage of infant deaths to total mortality	25·8	„	25·6

VITAL STATISTICS.

Meteorology:—The meteorological data for the city for 1926 as recorded by the Madras Observatory is furnished in a statement on page 162.

Rainfall:—A marked feature in the climatic conditions of the city during the year was the abnormal drought caused by the scanty rainfall, which was 31·42 as against 66·84 inches in 1925, the quinquennial average being 53·98. Details of rainfall during the last six years are shown in Table B on page 194.

Population:—As estimated to the middle of the year on the basis of the ratio of intercensal increase the population was 5,33,123. This includes the population of the extended area of Mambalam also. The calculation of weekly mortality and the annual rates of vital statistics continued to be based on the census figures for 1921.

Registration of Births and Deaths:—The registration of births and deaths and the work of vaccination were in charge of 13 Medical Registrar Vaccinators, all of them being licensed medical practitioners, and 31 assistant vaccinators and 2 female vaccinators.

Births:—22,000 births were registered during the year, exclusive of still births, giving a birth rate of 41:6 against 43:6 in the last year and 41·7 the average for the last five years. It will be seen from this that there was a slight decrease in the birth rate between the last and the current years (by 1,070 children). The birth rate by races and the rate among the principle sub-divisions of the Hindu Community are shown in Tables C and D on pages 195 and 196 respectively. Patnawars returned the highest rate of 65:2 and Chetties the lowest rate of 31:6 per mille,.

Births by sex:—22,000 births were registered during the year. Of these, 11,184 were males and 10,816 were females, the ratio of males per 100 females being 103·4.

Births by months:—The births in each month during 1925 and 1926 are given in Table E on page 197. In December, the largest number of births were recorded and in November the next and in February the lowest.

Illegitimate births:—The illegitimate births registered during the year were 600 against 630 in 1925 and 563 in 1924.

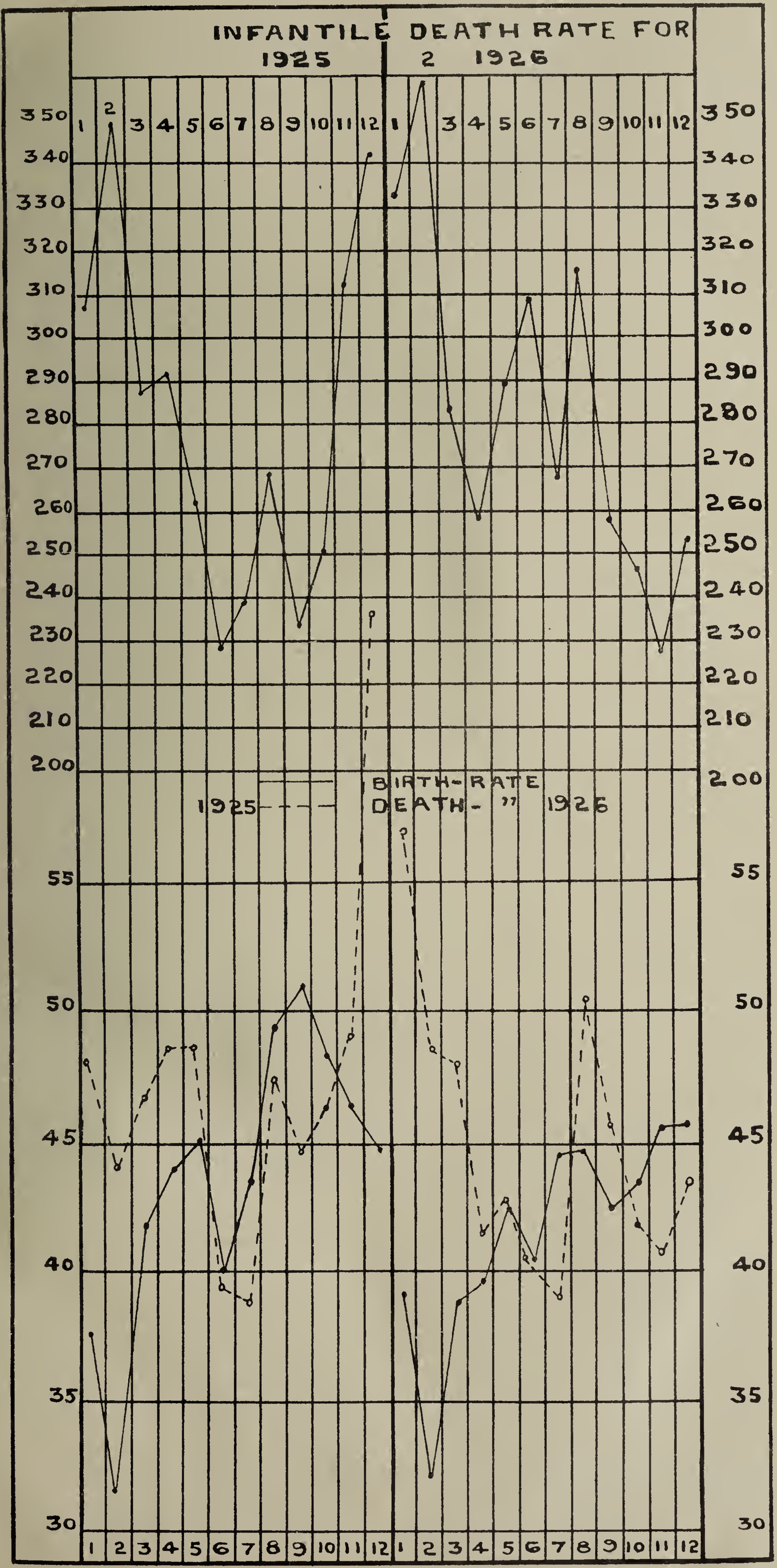
Still births:—1,105 still births were registered in the year as against 1,335 and 1,274 in the years 1925 and 1924 respectively. The number of still births has been on the increase since 1918, due to poverty, unhygienic home conditions, disease in the mother or father or both and allied causes which bring about some morbid condition in the pregnant mother. The high still birth return indicates the low standard of the life of the population and is a true index of the existing morbidity amongst its female population.

Deaths:—23,776 deaths were registered during the year as against 25,000 in the previous year. These exclude the still births. The ratio of deaths calculated on the census population of 1921, was 45·0 against 47·3 in the previous year, including that of the extended area of Mambalam, the near ratio for the quinquennial being 41:5.

DEATHS FROM PRINCIPAL CAUSES, 1926.

Diseases.	Number of deaths.		Proportion per 1000 deaths from all causes.	
	1926.	1925.	1926	1925
1. Small-pox	60	763	3	31
2. Measles	21	96	1	4
3. Cholera	98	203	4	8
4. Enteric Fever	152	99	6	4
5. Dysentry	2167	2279	91	91
6. Diarrhœa	1700	1752	71	70
7. Fevers of unknown origin including Influenza	1191	940	50	38
8. Malaria	1342	1298	57	52
9. Pneumonia	1038	1594	44	64
10. Tuberculosis of respiratory system.	1361	1516	57	60
11. Other forms of tuberculosis ...	177	88	7	3
12. Other diseases of respiratory system	3894	3218	164	129
13. Deaths from child birth ...	352	344	15	14
14. All other causes	10223	10810	430	432
Total ...	23776	25000	1000	1000

GRAPH SHOWING BIRTHS DEATHS & INFANTILE DEATH-RATES BY MONTHS FROM



Reg. No. 951/2

Vandyke., Survey Office, Madras.
1927.

N.B:—All fevers include cases of Enteric Fever, Malaria, Influenza and fever of unknown origin.

During the year deaths from all fevers were 113 to 1,000 deaths from all causes against 93 in previous year.

Class:—57 deaths were registered among Europeans, 303 among Anglo-Indians. 1,068 among Indian Christians. 19,552 among Hindus, 2,794 among Muhammadans and 2 among others, the respective ratio being 19·4, 33·7, 33·2, 45·6, 52·1 and 1·1. The figures are somewhat interesting in that they show that the healthiness or otherwise of any community is largely influenced by the social and economic conditions under which they live.

Age and Sex:—Of the total number of 23,776 deaths in the year, 11,976 were among males and 11,800 among females. The number of deaths among males was thus in proportion of 101·5 males to every 100 females. The number of deaths and their percentage to total deaths in several age periods is given below.

Age group.	Deaths.	Percentage to total deaths.
Under 1 year of age	6145	25·8
1 and under 5 years of age	4120	17·3
5 do 10 do	997	4·2
10 do 15 do	527	2·2
15 do 20 do	721	3·0
20 do 30 do	2034	8·6
30 do 40 do	1763	7·4
40 do 50 do	1467	6·2
50 do 60 do	1568	6·6
60 and upwards	4434	18·7
Total ...	23776	

The deaths were at the highest at the extremes of life in both sexes and at the lowest between the age periods 10 and 20.

Infant mortality:—The number of deaths of children under one year was 6,145 or 26 per cent. of total deaths as against 6,431 or 26 per cent. in 1925. The infantile death rate per 1,000 births was 279·3 against 278·8 in 1925, the quinquennial average being 276.8. The following table shows the distribution of infant mortality per 1,000 live births by age and by causes.

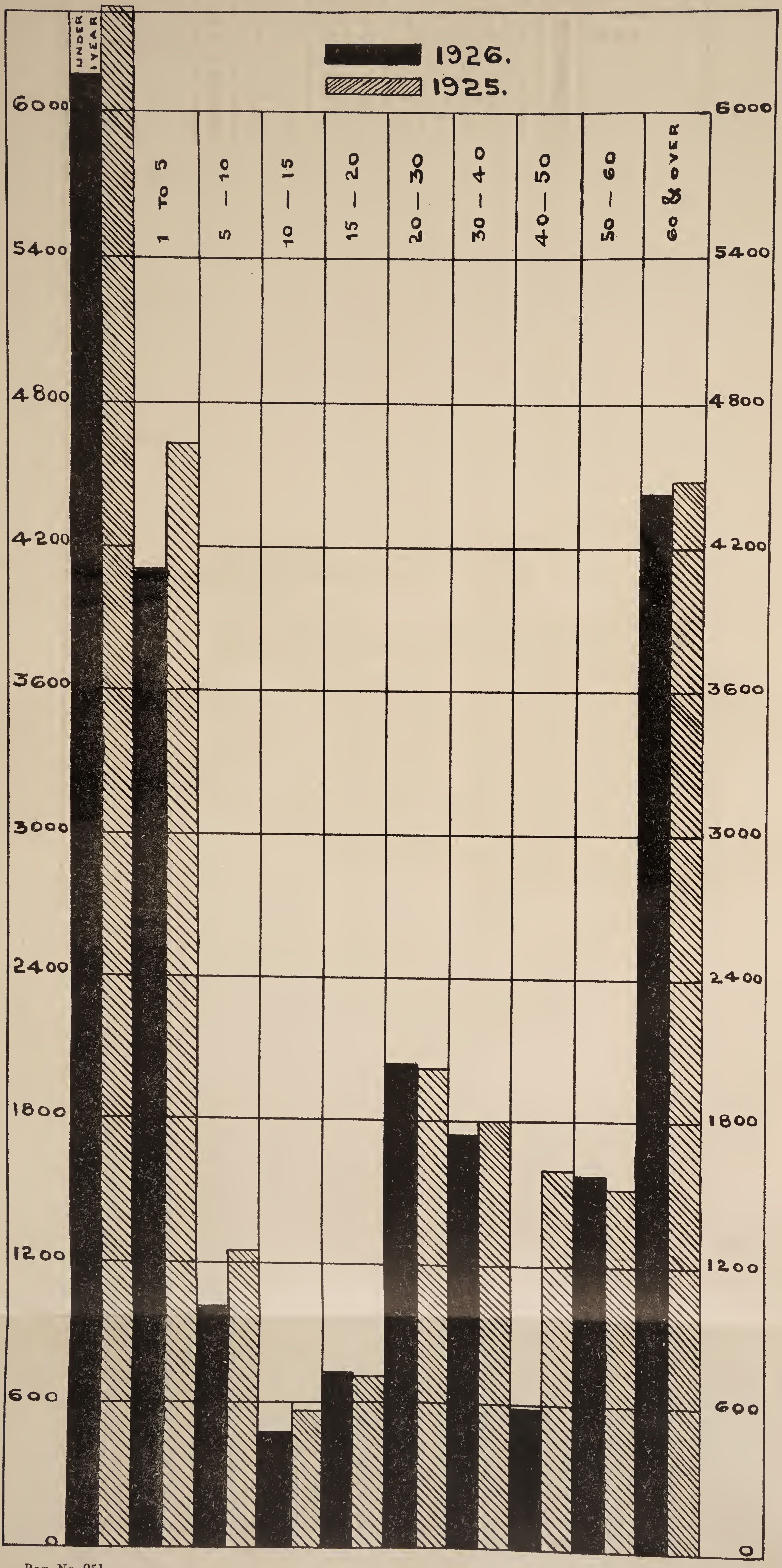
Year.	Deaths of infants under 1 month per 1000 live births.	Deaths of infants aged 1 month and under 4 months per 1000 live births.	Deaths of infants aged 4 months and under 12 months per 1000 live births.
1921	113·5	50·2	118·2
1922	132·3	50·4	125·3
1923	112·7	43·4	98·0
1924	111·1	46·9	105·6
1925	111·4	47·7	119·6
1926	98·5	53·0	127·8
Causes of death.			
Small-pox	...	0·05	0·2
Measles	...	...	0·1
Other fevers	0·7	2·0	5·7
Dysentry and Diarrhœa ...	1·1	8·5	30·2
Premature birth	56·6	1·5	0·2
Debility	12·4	8·9	5·1
Nervous system	9·7	6·4	16·7
Respiratory system ...	10·4	22·8	59·8
All other causes	6·3	2·7	8·8

The above statement also shows the high deathrate of infants under one month of life. This rate with slight variations is fairly constant in all countries as in this city, the proportion of infants who die before reaching the age of one month is actually on the rise since 1921.

Year.	Number.	Percentage to total infant deaths.
1921	2178	40·3
1922	2865	42·9
1923	2590	44·4
1924	2598	42·3
1925	2570	32·9
1926	2167	35·3

This neonatal mortality is mainly due to ante-natal circumstances attendant on birth itself and is very largely uncontrollable, and improvement in it can be expected only when ante-natal clinics are opened in all child welfare centres, with the very object of dealing with these prenatal conditions, by providing appropriate treatment for the mother during the ante-natal period.

GRAPH SHOWING MORTALITY IN 1925 & 1926
ACCORDING TO AGE GROUPS



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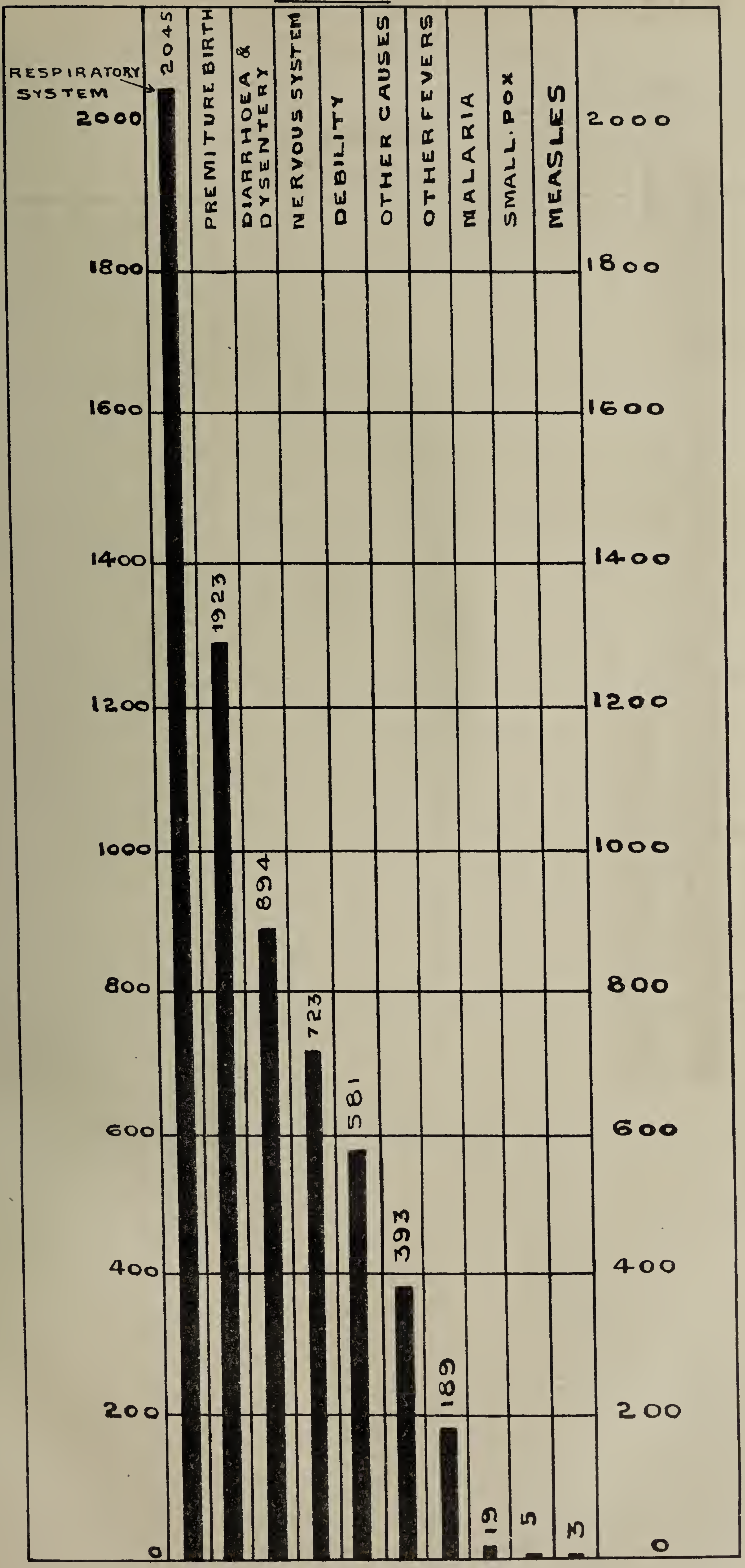
GRAPH
CAUSES OF INFANTILE DEATHS
1926



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1927.

Causes of infantile deaths:—The main causes which contributed to the infantile death rate were respiratory diseases (2045), premature births (1293), dysentry and diarrhoea (894), infantile convulsions (723) and all other causes (393). Human aggregation, ill-ventilated tenements, extremes of weather and artifiicial feeding act as the chief exciting causes for respiratory diseases and dysentry and diarrhoea.

CAUSES OF MORTALITY—INFECTIOUS DISEASES.

Malaria:—Annual form No. X on page 171 shows that 1,342 persons died of this disease as against 1,298 in the previous year and 971 in 1924 or 5·6 per cent. of the total deaths, as against 5·2 per cent. in 1925 and 4·4 per cent. in 1924. Expressed in ratio per mille, it was 2:6, 2:5 and 1:8 respectively. The mean ratio for the previous five years was 1:7. It is worthy of note that mortality from Malaria is terribly on the increase. Anti-Malarial operations are therefore very urgently needed.

Dysentry and Diarrhoea:—The number of deaths registered from these causes was 3,867 or 16:3 per cent. of total deaths against 4,031 for the previous year. This represents a death rate of 7·3 per mille against 7·6 per mille in the previous year. The largest number of deaths were recorded in August and the next in September. The mean ratio for the prvious five years was 7·5. The number of deaths from these causes for the previous five years is given below.

Year.	Deaths.
1921	4149
1922	4167
1923	3778
1924	3700
1925	4031

Kala Azar:—38 deaths were registered as due to this cause, the corresponding figures for 1925 and 1924 being 67 and 50 respectively. The ratio was 0·07 per mille. There is an appreciable reduction in the year under report.

Dangerous Infectious Diseases:—The following are the dangerous diseases notifiable under Section 329 of the Act IV of 1919.

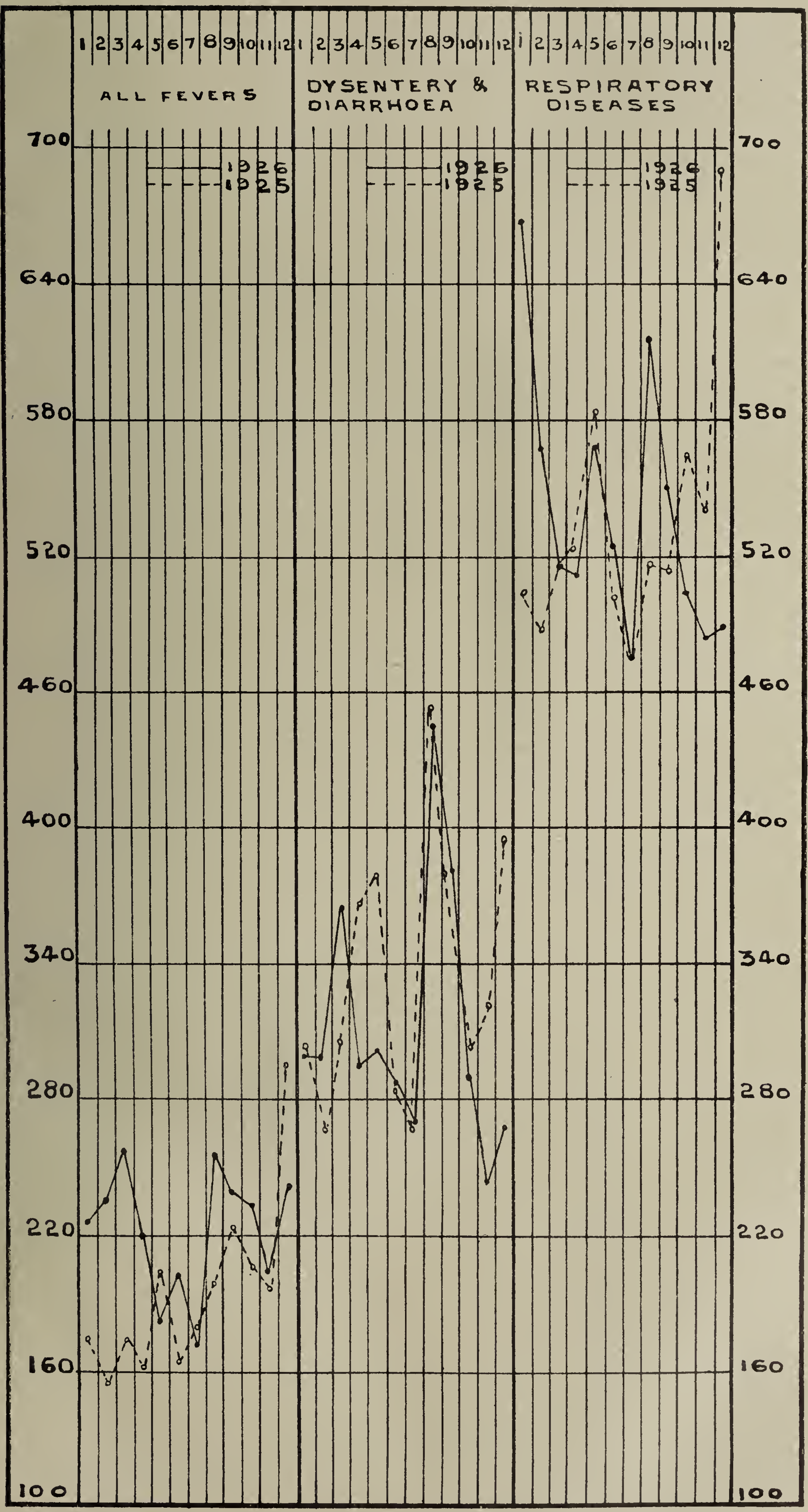
- Cholera.
- Small pox.
- Measles.
- Plague.
- Acute Influenzal Pneumonia.
- Relapsing Fever.
- Tuberculosis.
- Diphtheria.
- Enteric Fever.

It is highly satisfactory to note that during the year under report the city has been healthier than in the previous year owing to the absence of epidemic of any kind. This is due to the dry climate that prevailed, associated with prolonged hot season. There were a few sporadic cases of cholera, small pox and measles reported from different parts of the city, and although they pretended to break out in an epidemic form, their spread was checked at the onset by adopting special precautionary and preventive measures. All cases of cholera and small pox reported to us were promptly removed to the two Infectious Diseases Hospitals for treatment and the contacts were kept under observation.

The infected houses were disinfected, the infected localities were watched and house to house inspection was made to trace out fresh attacks, if any, for immediate attention and necessary action. Leaflets were distributed broadcast and Health Lectures were delivered advising the people to take all necessary precautions.

Cholera:—Cholera was prevalent in this city during the year only in a sporadic form. There were 156 attacks and 98 deaths reported during the year against 377 attacks and 203 deaths in the year 1925. 63 per cent. of the cases proved fatal as against 54 per cent. in the previous year, the ratio being 0·2 per mille against 0·4 per mille. The mean ratio for the previous five years was 0·2 per mille.

GRAPH SHOWING TOTAL DEATHS BY MONTHS FROM



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1927.

Small-pox:—Small-pox was prevalent in the city throughout the year in a sporadic form. The number of attacks during the year was 300, of which 60 or 20 per cent. proved fatal, as against 1,807 attacks and 763 or 42·2 per cent. of deaths during the previous year. The annual death rate was 0·1 per mille against 1·4 per mille in 1925. The mean ratio for the previous five years was 0·9.

Measles:—The number of deaths registered from this cause was 21 against 96 in 1925. The annual death rate was 0·04 per mille against 0·2 in the previous year, while the mean ratio for the quinquennium was 0·1.

Plague:—There were no cases of Plague reported during the year.

Influenza:—There were six deaths from this cause against 35 in the previous year. The annual death rate was 0·01 per mille.

Enteric Fever:—Deaths due to this cause were 152 or 53 deaths more than in the previous year, giving a ratio of 0·3 per mille against 0·2 in 1925. The mean ratio for the previous five years was 0·1. The return of deaths for the previous ten years is shown as below:—

Years.	Deaths.
1916	49
1917	47
1918	45
1919	52
1920	66
1921	85
1922	74
1923	51
1924	65
1925	99

It is important to note that mortality from Enteric Fever is on the increase in the city.

General Respiratory Diseases excluding Tubercle and Tuberculosis of the Lungs:—4,932 deaths were due to respiratory diseases, being 120 deaths more than in the previous year. The ratio was 9·3 per mille against 9·1 in 1925, the mean ratio for the previous five years being 7·4. The largest number of deaths from these causes were in August and next in January. Overcrowding, ill-ventilated and insanitary dwelling houses and sudden exposure to cold or a wetting in the rain are the causes that favoured the onset of the disease. The number of deaths for the previous five years is as follows:—

Year.	Deaths.
1921	3150
1922	3823
1923	3342
1924	4130
1925	4812

Tuberculosis including tubercle of the Lungs:—There were 1,538 deaths from this cause or 66 deaths less than in the previous year, the ratio being 2·9 per mille and the average for the previous five years 2·4. It does not appear to be fully recognised by the public yet that Tuberculosis is a "Dangerous Disease" and that some system of control of cases is necessary. This can be done only by making the notification of this disease compulsory, whereby the medical practitioners in the city and the authorities of the several hospitals will be obliged to co-operate with the Health Department in their attempt to reduce mortality under this head.

Diseases of the nervous system:—2.084 or 8·8 per cent. of the total deaths were registered under this heading against 2,580 or 10·3 per cent. in the previous year. Of these 723 deaths were those of children under one year of age against 1,083 in 1925, who presumably died of convulsions.

Of the remaining 361 cases, 31 deaths were registered as due to puerperal eclampsia giving a death rate from the disease of 0:1 per mille of the female population. Hemiplegia accounted for 213 deaths and Tetanus for 38.

Certified deaths:—3,342 deaths were certified by qualified medical men or 14·06 per cent. of the total number of deaths in the city. Of these, 968 were certified by private medical practitioners and 2,374 by public hospitals.

Burial and Burning Grounds:—The number of Corporation burial and burning grounds remained the same as in previous years and they were in charge of the sanitary inspectors of the respective divisions. Lands for the erection of tombs over the graves were sold to 176 applicants on payment of 8 annas per sq. foot of land and the amount realised thereby was Rs. 1.253-10-0. During the year, 18,012 dead bodied excluding 1,105 still briths, were buried and 5,164 were burnt. 82 vettyans were licensed during the year.

Extract of births and deaths:—The number of applications received during the year for the extract of entries from birth registers was 308 and 423 from death registers. Out of these 206 birth extracts and 347 death extracts were granted. In 128 cases, the extracts were not granted, the parties having failed to pay the fees. In 50 cases the entries could not be found and the parties were accordingly informed. The fees collected during the year for such extracts amounted to Rs. 1,018-8-0.

A brief report of the Port Health Officer, Madras for the calendar year 1926:—

Incoming vessels:—720 vessels arrived here during the year from plague infected ports with 72,289 crews and 86,751 passengers, against 661 vessels with 61,248 crews and 69,213 passengers of the previous year.

Outgoing vessels:—290 vessels with 29,350 crews and 71,909 passengers were inspected and granted bills of health during the year, against 271 vessels with 21,158 crews and 33,668 passengers of the previous year.

Epidemic and Infectious Diseases:—2 cases of chicken pox, 3 cases of suspected small-pox, 3 cases of suspected Cholera, 4 cases of mumps, one case of Dengue Fever and 1 case of acute Penumonia were found amongst passengers and crew on the steamers that entered the harbour during 1926. The suspected cases of Small Pox, Cholera and Chicken Pox were sent to Infectious Diseases Hospitals for admission, observation, and treatment.

The disinfection of bedding and clothing of deck passengers and crew landing and embarking from here is continued. The disinfection shed is in charge of a Sub Assistant Surgeon and a nurse is employed for examining female passengers.

Rats on steamrs:—No unusual mortality was found on any of the steamers that entered the harbour during the year under report. A clayton apparatus is maintained in the port.

VACCINATION.

During the year, thirteen Medical Registrar Vaccinators, were in charge of vaccination in the city. They were assisted by 31 Assistant Vaccinators including 2 Female Vaccinators. The Female Vaccinators worked in Gosha and Muhammadan quarters. In addition to vaccination, they made house to house inspections to detect cases of infectious diseases.

As usual, the lymph required for the operations was supplied by the King Institute of Preventive Medicine, Guindy. 26285 vaccinations (15720 males and 10565 females), were performed during the year, against 77702, (51937 males and 25765 females) in the previous year. Of them, 19330 cases were primary against 19428 or only 98 cases less than in the previous year. 6955 persons were revaccinated against 58274 in 1925, the appreciable decrease is due to the absence of an epidemic of Small-Pox. In 1925, Small-Pox prevailed in an endemic form and 1807 attacks with 763 deaths were reported against only 300 attacks and 60 deaths of the year under report. As a result of it, revaccinations were pushed on vigorously last year and the employees of all the public and private institutions and a large per cent. of the population in the infected locality were revaccinated, thus leaving not many cases for the current year.

Of the total number of vaccinations 25811 were performed by the Corporation staff and 474 were reported as vaccinated by the Medical staff of the penitentiary. Of the former number, 19330 cases were primary vaccinations against 19428 in 1925 and 6481 were revaccinations, as against 57652 in 1925 and 18603 in 1924.

15479 primary vaccinations were performed at the depots, 3851 were domiciliary vaccinations performed on application or otherwise. The remaining were those performed in several institutions, infected localities, slum areas and places.

Reward for revaccination.—Every individual who volunteered for revaccination in cherries and hutting grounds in the city was paid a reward of 4 annas. 46 persons over ten years of age were revaccinated and the rewards paid during the year amounted to Rs. 11-8-0. In each case, the reward was paid at the time of verification of results by the Assistant Health Officers.

Percentage of success.—In 19254 primary cases, the results of vaccinations were verified by the Assistant Health Officers and the Medical Registrar Vaccinators. Of them, 15975 were brought to the depots as required by law. The Health Officer has himself verified the result of vaccination in several depots during his visits of inspection. Of the 19254 primary cases verified, 19133 were successful and 121 unsuccessful, the percentage of success being 98·8 against 98·8 in 1925. As in previous years, cases with one or more scars have been taken for the success rates.

11735 cases were verified by the Assistant Health Officers against 10449 cases, in the previous year. Of all cases verified, including those reported by the Government Penitentiary, the percentage of success in primary and revaccinations was 99·4 and 67·7 respectively against 67·7 and 98·8 in 1925.

Vaccination of Children under one year.—Of the total number of primary vaccinations (19330), 15257 were among children under one year of age against 15503 in the previous year. Of 15257 children vaccinated under one year 11675 were born in Madras and 3582 in the moffusil.

Analysis of successful cases under primary vaccination according to vaccine cicatrices.—

Out of 19133 cases considered as successful under primary vaccination, the number of persons who had one or more vaccination cicatrices and the percentage to the total successful cases is furnished in the table below.

Number of persons who had one vaccination cicatrix.	Number of persons who had two vaccination cicatrices.	Number of persons who had three vaccination cicatrices.	Number of persons who had four or more vaccination cicatrices.	Total successful.
218	1,200	1,018	16,697	19,133
	Percentage to total successful vaccination.			
1·1	6·3	5·3	87·3	99·4

Percentage to total successful cases:—From the statement in page 18, it will be seen that 16697 or 87·3 per cent,. of cases of primary vaccination has resulted in 4 or more cicatrices and according to modern accepted theory, these alone can be said to give protection lasting for 5 or 7 years. Susceptibility to Small-Pox is in inverse proportion to the immunity conferred, as judged by the number of scars, or more precisely to the total extent of vaccinal cicatrix produced which should not be less than ½ square inch.

Verification of births.—16543 births were verified during the year against 17338 in the previous year, of which 3661 or 22·7 per cent. died before reaching the age of one year. 2736 or 16·5 per cent. were reported to have been removed permanently out of the city (against 2930 in 1925), and 355 were not traceable at the addresses given in the counterfoils. Of the remaining 9791, 8230 or 49·7 per cent. of births verified were vaccinated in the city and 489 cases were found vaccinated elsewhere and 66 cases were found protected by Small-Pox. Vaccination was postponed in 1066 cases against 989 in 1925, of which 183 were certified by Medical Practitioners and 513 by the Assistant Health Officers and Medical Vaccinators and 225 had temporarily left the city. In the remaining 145 cases pending at the close of the year, the parents were warned to have their children vaccinated without delay. Enquiries made to ascertain the vaccinal history of 1276 children born in the city but removed out of it before being vaccinated showed that only 132 had been vaccinated.

Hospital Births.—6199 hospitals births were verified during the year of which 1078 or 17·2 per cent. were reported to have died, 1198 or 19·3 per cent to have been permanently removed from the city and 1720 not to have been traceable at the addresses given in the birth counterfoils, leaving 2203 available for vaccination. Of these, 1795 were vaccinated during the year and 137 cases were found vaccinated.

Vaccination was postponed in 28 cases on medical certificates and in 125 cases by the Assistant Health Officers and the Medical Registrar Vaccinators and 48 children had left the city temporarily. Vaccination was pending in 70 cases.

As usual the number of untraced cases of hospital births was high. It was due to the insufficient and incorrect addresses given by the Medical Officers in charge of the hospitals, the percentage of untraced cases being 27·7 against 30·4 in 1925. In the report for 1922, the difficulties experienced in tracing out cases for vaccination have been fully explained and though the help of the Government has been sought, no perceptible improvement has been achieved.

Information regarding the number of births verified by the vaccination staff during the year 1926 and the number of children vaccinated before they reached the age of 1 year is given in the statement on page

Vaccination by caste.—The following table shows the number of vaccinations performed by caste. The vaccination of Europeans and Anglo-Indians was proportionately larger than that amongst other classes.

	No. of vaccinations.	Percentage to population.
Hindus ...	21651	5·0
Mohamedans ...	2032	3·8
Indian Christians ...	1664	5·2
Europeans, Anglo-Indians and others ...	464	3·9

Prosecution.—During the year, no prosecution was instituted for the infringement of the bye-laws under Section 349 (26) of the Madras City Municipal Act IV of 1919. The fines imposed in Courts are not deterrent, and in fact, in this as well as in many other municipal branches of work more reliance should be placed on persuasive methods.

It is noteworthy that the number of certificates received from Registered Medical Practitioners, recommending postponement of vaccination of children on grounds of ill-health is only 183 for the year under report against 254 in 1925. It has been on the increase during the previous years. Public Health Authorities have to depend very largely on the co-operation of the Medical Practitioners who can on requisition get lymph free of cost for vaccinating their patients and their families. The Corporation have further decided to carry on vaccination at private houses free of charges and any rate-payer can make an application to the Health Officer for getting the fullest benefit from the concession.

Cost of Vaccination.—The cost of registration and vaccination during the year was Rs. 39,422-8-7. Debiting half of this amount to vaccination, the cost amounted to Rs. 19,711-4-4 and the net cost of each successful vaccination was Re. 0-12-5 against Re. 0-14-1 in the previous year.

Practical Training of 1st Class Vaccinator Pupils.—In pursuance of G.O. No. 1271 L. Press (L. & M. Department) dated 22nd December 1920, 59 First Class Vaccinators were deputed by the Director of Public Health for practical training in vaccination work for about six weeks. The students were given training at the Corporation vaccinaton depots from the 22nd February 1926 to 31st March 1926. The pupils worked under the immediate supervision of the Medical Registrar Vaccinators and all of them were examined by the two range Assistant Health Officers and recommended for qualifying certificates.

SANITATION.

Officers of the Health Department.—Rao Bahadur Dr. K. Raghavendra Rao, B.A., M.B , & C.M., (Mad.) D.P.H., (Camb.), who was the Health Officer since 1915, was taken back to Government service from the 14th August 1926 as Assistant Director of Public Health, Madras. Dr. C. S. Govinda Pillai, M.B. Ch.B., L.R.C.P. & S., D.P.H. (Edin.), was appointed to act for him from that date. Dr. A. Muthukrishna Reddy, B.A., M.B. & C.M., acted as Assistant Health Officer, North Range, in place of Dr. C. S. Govinda Pillai, and Dr. P. Sadasivan continued as Assistant Health Officer, South Range. Dr. P. Sadasivan was on leave on average salary for one month during May 1926. Dr. A. Muthukrishna Reddy acted for him during this period.

Administration.—As before, the administration of the Health Department was carried on by the Health Officer, assisted by two Assistant Health Officers one for the north range comprising 1 to 16 divisions and the other for the south range comprising 17 to 30 divisions. 16 Sanitary Inspectors, each assisted by a Process Server and a peon, were in charge of the whole city. The clerical staff continued to be as in the previous year. The need for more clerks was pointed out during the year, and it is hoped that it will receive due attention.

Drains.—There was a steady progress in the underground drainage operations and the appended statement shows the areas that were sewered during the year.

The question of the retention or otherwise of the side drains in sewered localities still remains undecided. Wherever they are retained, they form breeding grounds for mosquitoes on account of stagnation of sewage in them, and until regular storm water drains in these places are constructed, the evil will continue. Facilities for flushing sewers and drains have not yet been afforded and in the absence of sufficient pipe water supply, arrangements may be made to flush them with the water from the local tanks and wells. The sewage system, wherever it has been introduced, has not been sufficiently utilised for the removal of human filth.

Statement showing the length of Sewers laid in Madras City up to 31–12–1926.

Municipal Division No.	Name of Areas.	Length of sewer laid up to 31–12–26.	Percentage of sewered portion.	Percentage yet to be sewered.	Remarks.
1	Rayapuram ...	39,983	80 per cent.	20 per cent.	
2	Tondiarpet ...	28,456	62 ,,	38 ,,	
3	Washermanpet ...	50,637	90 ,,	10 ,,	
4	Korukupet ...	22,037	60 ,,	40 ,,	
5	Harbour ...	26,040	85 ,,	15 ,,	
6	Muthialpet ...	20,372	80 ,,	20 ,,	
7	Katchaleswaren ...	51,283	70 ,,	30 ,,	
8	Kothawalchavadi ...	21,358	97 ,,	3 ,,	
9	Ammen Kovil ...	24,481	97 ,,	3 ,,	
10	Seven Wells ...	28,766	100 ,,	...	
11	Sowcarpet ...	16,637	95 ,,	5 ,,	
12	Peddunaickenpet ...	29,649	95 ,,	5 ,,	
13	Trevelyan Basin ...	29,501	95 ,,	5 ,,	
14	Esplanade ...	800	4 ,,	96 ,,	
15	Park Town ...	4,214	2 ,,	98 ,,	
16	Perambur ...	18,271	40 ,,	60 ,,	
17	Choolai ...	25,559	45 ,,	55 ,,	
18	Purasawalkam ...	47,358	95 ,,	5 ,,	
19	Vepery ...	32,625	60 ,,	40 ,,	
20	Egmore ...	63,574	65 ,,	35 ,,	
21	Kilpauk ...	28,431	52 ,,	48 ,,	
22	Nungambakkam ...	6,151	10 ,,	90 ,,	
23	Chintadripet ...	40,623	95 ,,	5 ,,	
24	Tiruvateswarenpet ...	47,271	85 ,,	15 ,,	
25	Chepauk ...	22,026	90 ,,	10 ,,	
26	Triplicane ...	25,038	80 ,,	20 ,,	
27	Amir Mahal ...	23,449	80 ,,	20 ,,	
28	Mirsahibpet ...	43,747	30 ,,	70 ,,	
29	Royapet ...	11,186	15 ,,	85 ,,	
30	Mylapore ...	34,667	30 ,,	70 ,,	
			66·13 ,,	33·87 ,,	

Water Supply.—The supply of pure filtered water to the city is yet an unsettled problem. Samples of water have been repeatedly examined at the Kilpauk Laboratory, and a detailed report of the work done by that section is appended.

Latrines.—The primitive type of sanded latrine is still in existence. In the interests of the health of the residents of the neighbourhood it is highly desirable that such latrines should be wiped out as early as possible. The present masonry latrines also are undesirable and they have to be converted into flushout ones at the earliest opportunity, and more flushout ones have to be provided to meet the needs of the poor population of the city and thus avoid defecation in streets, lanes etc., and the consequent pollution of earth and air.

Urinals are equally desirable in goods numbers. Street—end drain type urinals are now being constructed and even these are bound to affect the health of the residents of the neighbourhood and they are exposed to public view.

Streets.—In the matter of streets and roads, the dust nuisance continues unabated. Tar grouting and macadamising are out of question, on account of their prohibitive cost. In their absence, to allay dust, the streets could at least be watered, by obtaining water from the public and private tanks and wells, as has been suggested in many of the previous reports.

Building Regulations (*Sections* 230 *to* 257).—As hitherto, applications for the construction of buildings were generally dealt with by the Works Department, but some of them were however referred to the Health Department for opinion.

Control over waters (*Sections* 262 *to* 268).—Action was taken in 430 cases. In spite of it there were still several private tanks and wells which were in an unsatisfactory state. Their neglect by the owners is mainly due to want of facilities of plant and skilled labour on account of their prohibitive cost. And legal difficulties stand in the way of their being conserved at public expense.

The Cooum and the Buckingham Canal still remain in the same insanitary condition as before and nothing has been done to improve them.

Housing (Sections 272 *to* 277).—During the year, house to house inspections were carried on more vigorously than in the previous year. 18569 houses were inspected as a routine measure against 10,115 in the previous year besides, 33,635 houses in connection with infectious diseases, and 5308 notices served to rectify defects, against 2,651 in the last year. The notice and prosecution statement attached hereto shows the volume of work turned out during the year. Want of housing accommodation and consequent overcrowding of existing houses still remain as unsolved problems.

Industries--Factories.—During the year under report, several factories were inspected and suggestions were made for their improvement. Industrial Hygiene still remains an untouched problem. It will be advantageous in the interests of the poor workers to employ a small sanitary staff to look after the amenities prvided for in these places. Even from a humanitarian point of view, much has to be done to afford all necessary conveniences for the well-being of the workers therein.

Licensable places.—The list of trades and professions falling under section 287 and dealt with during 1926 is attached. It is highly desirable to restrict these trades to certain parts of the city according to the extent of nuisance and danger to health caused by them. The decision of the Standing Committee (Health) regarding the general policy to be adopted in the matter and their approval of the byelaws framed to control these places are still awaited.

4,413 applications were received for the grant of licenses for all trades, of which 4,228 were sanctioned, 96 were refused and 89 were pending disposal at the end of the year.

Lethal Chambers.—The construction of the new Lethal Chamber at Basin Bridge Incinerator, referred to in the last year's report was completed by the end of the year. Stray dogs were in the meantime received at the Lethal Chamber at Krishnampet. Proposals made in the previous years for electrocution of stray dogs have not yet been sanctioned. Bylaws framed in the matter of disposal of stray dogs and for the prevention of rabies were approved during the year.

Out of 2515 dogs 2351 bitches and 3 pups caught and admitted into the Lethal Chambers 2283 dogs 2245 bitches and 3 pups were destroyed, and 260 dogs and 120 bitches were claimed by the owners on payment of Rs. 141–14–0 while the sum spent on feeding the animals was Rs. 613–0–8.

Cattle-yards, Cow-houses and hack stables.—Out of 1,435 applications received for lincenses for cattle-yards, 5 were refused licenses, 1,416 were allowed and 14 remained pending at the end of the year.

During the year, there was a steady progress in the improvement of yards and stables where animals are kept, but much remains to be done yet. Action was taken to prevent straying of cattle in the streets and thoroughfares. A conservancy peon from each division was daily deputed to go to the nearest police station and take a police constable and with his aid impound all stray cattle found in his division, with the result that after a time this nuisance abated to a large extent. However, municipal cattle pounds for impounding stray cattle and for housing the sick animals in the various divisions of the city are a necessity, and early steps may be taken to provide them.

The Corporation continued to maintain the two model cow houses at Chintadripet and Basin Bridge. The collection of rents is attended to by the Revenue Department, the sanitary supervision thereof vesting in the Health Department. During the year animals were kept in these cow houses respectively. These are not sufficient and more have to be provided at an early date in the several divisions of the city, close to the milkman's quarters, to prevent the incessant danger to public health arising from the private yards.

Elephant Gate cart-stand was as usual let out in auction for the right of collecting rents and fees for Rs. 7,500 as against Rs. 7,000 in 1925--26. The other cart stand maintained by the Corporation is under the control of the Revenue Department. More Municipal cart-stands are desirable in the interests of public health and if constructed, they will also prove to be remunerative in the long run.

117 applications for licenses for keeping hack stables were received, of which 116 were sanctioned.

Milk Trade (*Section* 299).—425 applications were received in regard to the licensing of persons dealing in milk or milk products. In the absence of legislation this trade cannot be controlled. Standards for milk have to be fixed and the byelaws have yet to be sanctioned. And even if there is proper legislation, it cannot do much, for the poverty of the milkman stands in the way of his adopting efficient means of dairying. The real solution lies in municipalising the supply of milk or in encouraging private enterprise on co-operative basis.

Washing and Bathing (*Sections* 291 *to* 293).—The number of bathing fountains are even now insufficient. It would be advantageous, if private philanthropic enterprise comes in a large measure to fulfil the longstanding elementary need of the poor folk.

Dhobikhanas.—The two dhobikhanas, one at Royapuram and the other at Chetput, continued to exist and their number has not been increased, though as a result of the deliberations of the Council more were expected to be constructed. It is advisable to provide the washermen with small sanitary washing places in the different parts of the city and thus to prevent them resorting to ponds, wells, pools, or the Cooum or other water courses.

Slaughter Houses.—The only public slaughter house at Perambur, where sheep, cattle and pigs are slaughtered was as in the previous years under the control of the Health Department. The right of collection of rents and fees for the use of the sheep and beef slaughter houses was as usual auctioned for a period of one year 1926-27 for Rs. 58,700 and Rs. 22,400 as against Rs. 57,000 and Rs. 21,700 respectively.

The contract entered into last year for the pig slaughter house was in force during this year as well, the lease being for three years. The number of animals slaughtered was 18,037 cattle, 3,94,613 sheep and goats and 1,771 pigs as against 18,588 cattle, 4,03,507 sheep and goats and 1,300 pigs in the previous year. The slaughtering chambers constructed last year to prevent the killing of animals in each other's presence were not freely used as expected. Persuasive methods have not been of much avail. Butchers and others who remove carcases from the slaughter house do not carry them in sanitary vans. Persuasion, advice and threats are of no avail to make them adopt sanitary methods. The bylaws on the subject, not still being approved by the Council, cannot be enforced.

Slaughter of animals at private premises. (Sections 296 to 298.—Permission was as usual granted for slaughter of animals on occasions of certain specified religious festivals and ceremonies at private residences free of charges, and the number so slaughtered was 5 cows and 273 sheep and goats. For other ceremonies a small fee of annas two was charged for every sheep or goat slaughtered. 1141 sheep and goats and 10 pigs were so slaughtered and the fees realised therefrom was Rs. 143-14-0.

Markets (Public).—The sanitary supervision of both the Moore Market and the Smithfield Market was in charge of the Health Department as in the previous years. In the Moore Market, the beef and fish stalls were removed to its annexe last year. Proposals made for another annexe to accommodate mutton and egg stalls and for a separate enclosure for housing birds and poultry have not yet materialised. The re-arrangement of stalls in the Evening Bazaar, referred to in the last year's report, has not yet been taken up. The need for more such public markets in the city has been pointed out in the previous reports and it is hoped that it will receive due attention at an early date.

Markets (Private).—The number of applications for private markets received during the year was 42, of which 39 were sanctioned and three were pending at the end of the year. As pointed out in the previous year, some of them are overcrowded, while others are sparsely occupied. More vegetable markets have to be provided in the neighbourhood of those that are full, either by the Corporation or by private owners.

Sale of articles of food.—There are too many coffee hotels, restaurants and eating houses in the city at present and their number is likely to increase year after year. Constant vigilance is necessary to enforce the sanitary regulations in these places. With the available sanitary staff and the limited statutory powers, it is not possible to exercise any effective control over them.

The prevention of adulteration of Food and Drugs Act was not brought into force during the year, nor was the special staff appointed. The list of unwholesome articles of food destroyed is attached for information.

Disinfectants.—Hycol was the disinfectant chiefly used during the year. Messrs. Alex. Hussam & Co., Stringers Street were the suppliers and 154 gallons were spent by the sanitary staff in addition to 24 paras of chunam. The number of places disinfected was 999.

Menagerie.—The Menagerie continues to exist in the same condition as in the previous years. The recommendations made in the previous reports have not yet been carried out much to the discomfort of the animals. The earlier the improvement of the Zoo is taken up the better. It is regrettable that a veterinary shed should not yet have been constructed, though its need was pointed out during the previous years. A detailed report of the working of the Zoo will be found in the Commissioner's Administration Report.

The right of collecting entrance fees from persons visiting the Zoo and for the occupation of bazaars attached thereto was sold in auction for a sum of Rs. 13,300 from 16-6-1926 as against Rs. 16,400 during the last year.

Health Propaganda.—Open air lectures on subjects relating to health and prevention of diseases were delivered by Sanitary Inspectors during the year, and 142 lectures were delivered by the Medical Officers in charge of municipal dispensaries with the aid of magic lantern slides. The Health Bulletin was as usual issued every month.

Weights and Measures.—The byelaws in this behalf could not be enforced during the year under report, as the special staff applied for was not sanctioned. Sanction for the staff is pending the consideration of the Council.

HOSPITALS AND DISPENSARIES.

The Health Department continued to maintain the 15 dispensaries and the two Infectious Diseases Hospitals in the city. The dispensaries are becoming more and more popular and there is a demand for more of them. Statement on page 41 shows the average attendance of patients in the dispensaries during the year.

During the year the patients were given two days medicines at a time.

The Infectious Diseases Hospitals continue to work satisfactorily. With a view to impart clinical instruction on infectious diseases to the Medical College students, an Assistant Surgeon was appointed to be in charge of the Infectious Diseases Hospital, Tondiarpet, at the instance of the Government. The Council having sanctioned the appointment of a sick nurse to this institution, one was entertained during the year, but the post was subsequently abolished.

At the instance of the Standing Committee (Health) its Chairman has drawn up schemes for regulatinng the working of the municipal hospitals and other medical institutions, which receive annual contributions from the Corporation.

As desired in G.O. No. 653 P.H. Mis., dated 10th June 1921, a brief summary of the Public Health work done during the year by the various institutions and organisations in the city, as reported by them, is given below.

1. *Saraswathi Sangam, Free Aushadalaya,* 28, *Pidariar Coil Street, George Town.*—A small indoor hospital was maintained during the latter part of the year and 38 patients were treated. The number of out-patients attended to during the year was 77,182 with a daily average of 210·8. The Corporation contributed a sum of Rs. 300 for its upkeep.

2. *St. John's Ambulance Corps.*—During the year under review, the corps worked in 6 local divisions with a total strength of 216 members and officers, held 39 parades and 2 inspections, and treated 1,022 cases of accidents. The services of the corps are generally requisitioned for all gatherings, sports and other congregations in the city. During the sea-bath festivals, this organisation with a band of youngmen did good work. Under the auspices of the corps, 720 were trained in "First Aid", 73 in Home Nursing and 12 in Home Hygiene. The Corporation pays a contribution of Rs. 100 per annum.

3. *Raja Sir Ramaswami Mudaliar's Lying-in-Hospital.*—This institution, maintained by the Madras Corporation, serves a very useful purpose to the poor people in the northern part of the city. 1,601 deliveries were recorded during the year. In addition, 710 indoor patients were admitted for ante and post natal treatment. 4,036 patients were treated at the outdoor department which serves as a popular infant clinic and ante natal centre. There are 50 beds for Indian patients. 18 pupil mid-wives, stipended by the Madras Corporation, underwent the prescribed course of one year. 142 Final Year L.M.P., students had their clinical training in mid-wifery. An out-patient prenatal ward and a septic ward are necessary for this institution.

Vupputtur Alwar Chetty's Free Ayurvedic Dispensary, Triplicane.—An Ayurvedic Dispensary is maintained by the charities, which serves a large population in Triplicane. The total number of patients treated during the year at a total cost of Rs. 2,838-8-3, was 79,620 as against 78,823 in 1925, the daily average being 218.

Kalyani Hospital.—This institution is growing in popularity in the southern part of the city, managed as it is exclusively by women. There are fifty beds here, exclusive of children's cots. The number of maternity cases attended to during the year was 549, of which 75 cases were sent by the Child Welfare Scheme, the total number of cases being 1,525. There are two out-patient dispensaries attached to this hospital, where 37,956 patients were attended to during the year.

San Thome Dispensary, Mylapore.—The total number of out-patients treated in this dispensary during the year was 10,889 as against 10,352 in 1925. The Corporation contributes Rs. 1,250 towards its maintenance.

The Triplicane Annadana Samajam, Pillayar Coil Street, Triplicane.—During the year under report 24,792 poor persons were fed by this institution through the help of several philanthropic gentlemen and 50 were clothed.

The Venkataramana Dispensary, Mylapore.—This dispensary is run on Ayurvedic lines and has established its popularity in the southern part of the city. The total number of patients treated during the year was 1,03,868, the average daily attendance being 284. The institution gets a contribution from the Corporation towards its upkeep.

The Friend-in-need Society, Poonamalle Road.—This institution affords relief to the deserving poor and serves to suppress mendicity amongst the European and Anglo-Indian Christians of every denomination. Under the efficient management, it is maintained to the satisfaction of all concerned. During the year 82 outside pensioners including those inhabiting the Model dwelling houses, Hendersonpet, 57 inmates in the home and 65 persons under casual relief system were maintained on the average by the Society. A small workshop is maintained and this is stated to have provided a healthy occupation for most of the women inmates of the home.

The Madras Society for the protection of Children, Thiruvathiur High Road, Washermenpet.—The number of children rescued during the year was 32 as against 41 in 1925. The number of children in the Society's home at the end of the year was 73. The Society is making orderly progress in protecting helpless children and preventing them from leading a miserable life in the city. A regular boarding and lodging school is maintained where in addition to 3 R's, Vocational training is given. The Corporation gives a grant for the upkeep of this Society.

First Division Rate-Payers Association, Madras.—This is a civic association started in October 1925 to attend to the civic needs of the division, and it is one of its objects to educate the citizens in matters relating to sanitation and conservancy. The Secretary claims that the efforts have been of some value to the ratepayers.

The Sociological Brotherhood, Triplicane.—This Society, founded by the late Rev. D. G. M. Leith, is carrying on its activities in slums and other areas of Triplicane to improve the existing condition, so as to enable the people therein to enjoy the civic amenities and good work is being done by it. The Corporation on its part is responding to the requests made in this behalf.

The Arya Vysia Ayurvedic Children's Free Hospital:—The total number of children treated in the hospital during the year under report was 34030 as against 30224 in 1925; The increasing attendance reveals the popularity this institution has gained during its seven years of existence.

Monegar Choultry and Rajah of Venkatagiri Choultry, Madras.—The report of the Surgeon, 1st District for 1925-26, which has been reviewed by the Government in their Order No. 2882, L. & M., dated 16th July 1926, shows that the average daily number of inmates in the Rajah of Venkatagiri's Choultry, was 67·42 as against 91 in the previous year, and the daily average cost of diet per pauper was 4 annas, 7 pies. The total number of admissions was 54. The Corporation contributes towards its maintenance. The average daily number of outdoor paupers who were doled out rice at $\frac{1}{4}$ measure per head was 144·25 as against 142·66 in 1924-25.

Chengalroya Naicker's Institute, Vepery.—The total number of patients during the year was 1,59,893, the daily average being 438. This institution is steadily increasing in popularity and people from different parts of the Presidency resort to this dispensary for treatment. In spite of other dispensaries being opened at short distances, the attendance does not show a fall and this attributes to the efficient treatment accorded therein. It would be advisable to have branches of such dispensaries in the various parts of the city.

San Thome Convent Dispensary, Mylapore.—This Dispensary is doing good work with the unflinching help of the sisters who are always eager to do their best to the poor suffering people. The attendance at the home and the outdoor dispensary shows an increase. The Corporation gives a contribution for its maintenance.

Sree Kannyaka Parameswari Devasthanam Charities Ayurvedic Dispensary.—The total number of patients treated during the year was 55,024 as against 57,092 in 1925, the average daily attendance being 152. The cost of running the dispensary was Rs. 4,378-10-9.

The Free Hahnemann Dispensary, Royapettah.—The total number of cases treated during the year is 17,832 as against 15,019 in the previous year. Free Medical aid to individuals resorting thereto is rendered on homeopathic system of medicine and the institution is gaining popularity. This institution was visited by several distinguished persons in the city and all of them have recorded their opinion in favour of the good work turned out there.

Tamil Vydia Sangham Dharma Vaidya Sala, Washermenpet.—The total number of persons treated during the year was 21,607 and the cost incurred therefor was Rs. 1,043-11-6. This institution is run on Sidha System of medicine.

C. T. Subramania Pandithar's Free Sidha Ayurvedic Dispensary, Mint Street.—The number of patients treated during the year was 7,757 and the total attendance was 20,636.

Women's Indian Association, Mylapore.—This institution maintains a "Baby Welcome" where children are given bath, and medical treatment is given to those who are ill. Expectant mothers are also visited. The vocational classes conducted by the home is doing useful work. The average daily attendance of the students was 50. The home is dedicated to the service of all classes of Indian women and to the improvement of the life of the mothers and children of the district and to train widows and women whose marriages have been unfortunate. The Madras Corporation pays an annual contribution for the maintenance of this home.

NOTICE.										PROSECUTION.											
					No. complied with																
Section or By-law.	Substance of Section or By-law.	No. Pending on 1st Jan. 1926.	No. issued during the year.	Total.	Voluntarily	By prosecution.	By transfer to W. D. for Departmental execution and recovery of cost.	No. cancelled.	No. pending.	No. of prosecutions pending disposal on 1st January 1926.	No. instituted during the year.	Total.	Number convicted.	Fines imposed.			Number acquitted.	Number withdrawn.	* No. in which parties were not found.	No. pending.	REMARKS.
1	2	3	4	5	6	6-a	6-b	6-c	7	8	9	10	11	12			13	14	15	16	17
														Rs.	A.	P.					
178 (4)	Occupying or allowing occupation of house without proper drainage ..	18	3	21	18	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	
185 (3)	Allowing of public latrine to be in unclean condition or improper order ..	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	1	...	...	
186	Failure to obey requisition to provide latrine or to remove latrine to another site and failure to keep latrines clean and in proper order ..	180	314	494	157	11	1	102	223	3	50	53	31	68	8	0	...	10	...	12	
188	Failure to obey requisition to provide latrine for market, cattle stand or cart-stand, or to keep them clean and in proper order ..	...	4	4	...	...	...	2	2	...	1	...	...	...	...	...	...	1	...	...	
189	Failure to construct latrines so as to screen persons using them from view ..	4	18	22	17	...	...	2	3	...	...	...	...	...	...	...	...	...	...	...	
195 (3)	Failure to obey direction to collect rubbish and filth and deposit them in public receptacle ..	...	2	2	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	
202 (1) ,, (2) ,, (3) ,, (4) ,, (5)	Allowing rubbish or filth to accumulate on premises for more than twenty-four hours. Irregular deposit of rubbish or filth .. Irregular removal of rubbish or filth .. Deposit of rubbish or filth in unauthorized place .. Keeping rubbish or filth for more than twenty-four hours, etc. ..	11	49	60	22	...	...	11	27	...	...	...	...	...	...	...	...	...	...	...	
260	Failure to obey requisition to repair, etc., tank or other place dangerous to passers-by or persons living in neighbourhood ..	...	15	15	5	...	...	2	8	...	3	3	...	...	...	...	...	...	...	3	
264	Failure to obey requisition to fill up, etc., tank or well, or drain off water, etc. ..	167	407	574	332	10	...	54	178	7	39	46	8	35	8	0	...	23	...	15	
265	Failure to obey requisition to cleanse or close, etc., tank, well or other source of water used for drinking ..	7	8	15	8	...	...	4	3	...	...	...	...	...	...	...	...	...	...	...	
267	Unlawful washing and fishing in river, or estuary after prohibition or contrary to regulations ..	...	...	...	...	...	...	...	...	1	16	17	1	1	0	0	...	14	2	...	
269	Failure to obey requisition to enclose, clear or cleanse untenanted premises ..	22	89	111	43	2	...	32	34	1	14	15	5	14	0	0	...	3	...	7	
270	Failure to obey requisition to clear or cleanse, etc., building or land in filthy state or overgrown with prickly-pear or other noxious vegetation ..	42	97	139	120	6	...	3	10	...	15	15	8	19	0	0	...	5	...	2	
272	Failure to obey requisition to lime-wash or otherwise cleanse building ..	130	870	1000	811	1	...	8	180	...	36	36	...	...	...	...	...	28	...	8	
273	Failure to obey requisition to execute work or take other action with respect to insanitary buildings ..	1344	4438	5782	3457	64	3	474	1784	22	371	393	66	159	8	0	...	212	2	113	
280(b)	Unlawful keeping of animals so as to be a nuisance or dangerous ..	...	...	...	...	...	...	...	...	4	57	61	33	111	0	0	1	5	...	22	
282	Use of place as stable, cattle-stand, etc., without license or contrary to license ..	...	...	...	...	...	...	...	...	63	228	291	177	967	0	0	4	68	...	42	
283	Repairs to or demolishing of stable, cattle-shed, cowhouse, etc., ..	140	152	292	112	25	...	32	123	...	...	...	...	...	...	...	...	...	...	...	
284	Construction or maintenance of stable, cattle-shed, etc., contrary to Act or subsidiary legislation ..	90	108	198	46	72	...	13	67	9	137	146	105	473	0	0	...	17	...	24	
286	Failure to remove carcass of animals ..	...	...	...	...	...	...	...	...	...	21	21	16	42	0	0	...	...	...	5	
287 (3)	Use of place without license or contrary to licenses ..	...	...	...	...	...	...	...	...	40	60	100	57	445	8	0	...	29	...	14	
293 (2)	Washing of clothes by washermen at unauthorized places ..	...	...	...	...	...	...	...	...	5	30	35	18	52	0	0	...	4	1	12	
297	Slaughter of animals for sale or food or skinning or cutting up carcasses without license or contrary to license or drying skin so as to cause a nuisance ..	...	...	...	...	...	...	...	...	...	33	33	25	59	0	0	...	...	3	5	
303 (2)	Opening private market without license or contrary to license ..	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	1	...	...	
304	Keeping open private market without license or contrary to license ..	...	...	...	...	...	...	...	...	...	1	1	1	150	0	0	...	...	...	...	
309	Carrying on butcher's, fishmonger's or poulteror's trade without license, etc. ..	...	...	...	...	...	...	...	...	9	27	36	24	63	8	0	...	7	1	4	
325	Burial or burning in place contrary to Act or By-laws ..	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	1	...	...	
334	Failure to obey requisition to cleanse or disinfect building or article ..	24	93	117	112	...	...	...	5	2	...	2	...	...	...	...	...	2	...	...	
345	Failure to give information of small-pox ..	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	1	...	...	
349(21)	Prohibition against sale of articles of food intended for human consumption without obtaining sanitary certificate ..	...	...	...	...	...	...	...	...	...	77	77	45	252	0	0	...	24	...	8	
376	Failure of occupier to obey requisition to permit owner to comply with the provision of Act.	...	1	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	

List of licensable places dealt with during 1926.

Purpose.		No. of Applications.	No. Sanctioned.	No. Refused.	No. Pending.
Aerated water Factories	...	50	50	...	...
Bake houses	...	84	76	5	3
Bones	...	2	2	...	...
Butcher	...	58	58	...	...
Brick Kilns	...	9	9	...	...
Candles	...	3	3	...	...
Carpets	...	2	2	...	...
Cartstands	...	16	16	...	...
Cattleyards	...	1435	1416	5	14
Catgut	...	1	1	...	...
Chemicals	...	35	34	1	...
Cocoanut fibre	...	14	14	...	...
Condiments	...	56	45	11	...
Cotton	...	17	16	1	...
Dairy Produce	...	425	422	...	3
Fat	...	1	1	...	...
Fish	...	15	15	...	...
Fleshings	...	2	2	...	...
Flour	...	92	87	4	1
Flax	...	1	1	...	...
Fins	...	1	1	...	...
Gilding	...	82	82	...	...
Hackstable	...	117	116	...	1
Hair (Sowri)	...	17	16	1	...
Hides	...	1	1	...	...
Hoofs	...	1	1	...	...
Horns	...	6	6	...	...
Hemp	...	1	1	...	...
Indigo dyeing yard	...	80	79	...	1
Jute	...	2	2	...	...
Leather	...	132	130	...	2
Laundries	...	51	51	...	...
Lodging houses	...	60	59	...	1
Lime Kilns	...	38	37	1	...
Manure	...	1	1	...	...
Markets	...	42	39	...	3
Meatstalls	...	111	62	48	1
Oil Boiling	...	15	14	...	1
Oil Mills	...	176	160	13	3
Oil Storing	...	292	279	...	13
Onions and Garlic	...	92	88	1	3
Paddy boiling	...	296	288	...	8
Paper	...	3	3	...	...
Pigsty	...	6	6	...	...
Rags	...	3	3	...	...
Rosin	...	12	12	...	...
Shellac	...	1	1	...	...
Skins	...	25	24	1	...
Soap	...	14	14	...	...
Spirits	...	91	88	...	3
Sugar	...	8	7	1	...
Sweet meat bazaars	...	290	262	3	25
Turpentine	...	22	19	...	3
Wool	...	6	6	...	...
Total	...	4413	4228	96	89

List of Foodstuffs destroyed during 1926.

Betel nuts	5 bags
Sago flour	7 ,,
Bran	2 ,,
Morili seeds	2 ,,
Wheat flour	4 ,,
Rice	17 ,,
Sugarcandy	1 bag
Grains	3 bags
Syrup	24 tins.
Custard Apples	3 baskets, 53 doz. & 11
Berri fruits	33
Lactogen	370
Brinjals	5 mds & 30
Cram tins	63
Chocolates	31 sticks
Cocoa	16 tins & 8¾ tins.
Cabbages	22
Tomatoes	2 doz.
Lime fruits	2 baskets & 110
Pumpkins	14
Potatoes	1 bag, 2 baskets and ½ viss
Radish	2 doz.
Tamarind	2 mds. & 4 viss
Black grapes	18 seers
Chutney	1 plate
Prony	17 baskets, 183 and as 6 worth
Sword fish	112 & 1½ lbs.
Gauva fruits	10½ doz. & 7
Colors	20 bots.
Pagodas	½ viss & ¼ seer
Mutton	lbs. 1569 & 16½ seers
Mutton prepared	5 plates
Aerated Waters	34 bots
Onions	21¼ baskets, 12 mds. & 1 viss
Fish	47¼ baskets, 2 heaps, 16½ lbs. 145 & ½ viss
Plantains	4 baskets, 167 doz. & 10
Sheep lungs	41
Masalvadai	4 plates & 30

Mangoes	8 baskets, 72 doz. & 4
Palmyrah fruits	2 baskets & 10
Beef	1 carcase, 183 lbs. 2 baskets & 8 viss
Apples	1 basket, 20 doz. & 6
Country apples	3 baskets & 57
Eggs	821
Cocoanuts	60
Biscuits	2 tins, 2 rolls, 6 lbs. & 40 packets
Oranges	3 baskets, 85 doz. & 3
Custard apples	18 doz. & 7
Tobacco	2 bales
Jam	108 tins, 7 bottles
Coffee seeds	1 bag
Tinned fruits	1 case, 6 tins & 1 bottls
Milk tins	3440 tine
Barley	4 tins.
Sugar	26½ bags
Poppy seeds	1 bag
Dates	2 bags
Sauce	65 bottles
Chitty powder	354 lbs. & 2 viss.
Dhol cake	20
Stale fish	50
Garlic	5 palams
Sweetmeats	4 viss. & ¼ seer
Peas	20 lbs.
Beans	40 lbs.
Pickles	10 lbs.
Carrots	10 lbs.
Crabs	70
Prawns	½ basket, 13 lbs. & 42
Dried fish	90 lbs.
Cold rice	2 pots
Nagapalam	5 measures
Butter	2 oz.
Thakkali fruits	12
Jack fruits	3 doz. & 9
Trashes	2 trays & 2 viss
Figs	½ viss
Green vegetables	3 baskets

List of Latrines, Urinals Incinerators etc., constructed during the year 1926.

S. No.	Dn. No.	Description of work.	Amount spent.			Remarks.
			Rs.	A.	P.	
1	4	Installing a single seat F. O. latrine and Urinal combined in Yeggappa Naicken Street	20	7	3	
2	4	Installing a single seat F. O. latrine and Urinal combined, in Thangavelu Pillai Street	237	2	9	
3	4	Installing a single seat F. O. latrine and Urinal at eastern end of Gold Smith Tank Street	313	0		
4	20	Constructing a F. O. latrine of 16 seats in Sami Reddy Cheri, Egmore	291	11	2	
5	20	Installing a double combined F. O. latrine and Urinal in Vengu Pillai Street Egmore	600	15	6	
6	25	Converting the existing Urinal into a F. O. of single seat at Pycrofts Road (near Bells Road)	184	0	10	
7	25	Converting the existing Urinal into a F. O. of single seat in Triplicane High Road just oppt. to Market (near Guzli) Triplicane	6	8	0	
8	30	Installing a convertible latrine of 12 seats in Vellala Teynampet	1,247	11	5	
9	7	Installing a first class Urinal in China Bazaar Road ...	146	5	2	
10	7	Construction of urinals at (1) Kothaval Bazaar Street ...	2250	0	0	
11	8	Construction of urinals at (2) Flower Bazaar Police Station				
12	9	Construction of urinals at (3) Portugeese Church Street, 7th lane				
13	10	Construction of urinals at (4) Nattu Pillaiar Koil Street, east lane				
14	12	Construction of urinals at (5) Wall Tax Road Junc. of China Bazaar Road				
15	13	Construction of urinals at (6) Badrian Street ...				
16	27	Construction of urinals at (7) Venkataswami Naicken Street, Junct. of General Swami Naick Street ...				
17	4	Constructing an incinerator in Lala Gunta lane ...	222	13	6	
18	16	Constructing an incinerator on the western side of Gantz Road	251	0	10	

List of Latrines, Urinals Incirerators etc., constructed during the year 1926.—(Contd.)

S. No.	Dn. No.	Description of work.	Amount spent.			Remarks.
			Rs.	A.	P.	
19	1	Improvements to compound wall of the Mahammaden Burial ground, Shaik Maistry Street	560	11	9	
20	2	Constructing compound wall etc., in the Hindu Burial ground and also burning ground, Washermanpet ...	5,792	10	9	
21	4	Demolishing and shifting the existing Adi Dravidas' burning platform to another site in the Hindu burial and burning ground, Washermanpet	143	11	1	
		Drains.				
1	4	Constructing a 6″ masonry drain from the B. F. in Palayathan Cherry...	82	1	2	
2	4	Constructing a storm water drain in Shaik Ali Lane to Muthian Chetty West Lane	407	1	11	
3	30	Constructing drain opposite to premises No. 1/1 Eldams Road, Vannia Teynampet	52	13	10	
		Repairs were done in respect of the following.				
1	2	Repairs to Bailiff's quarters, Old Slaughter House Road...	156	0	0	
2	2	Repairs to Surgeant's quarters, Robinson Park ...	98	1	1	
3	17	Repairs to Smith Field Market	2,340	8	4	
4	19	Repairs to Fowl cages, Moore Market	186	10	0	
5	20	Repairs to Baby Welcome Home, Goyathope ...	204	10	1	
6	21	Repairs to Latrine in 21st Division	471	0	0	
7	21	Constructing 2 cremation platforms in Pursawalkam Burial ground	112	0	0	
8	22	Repairs to latrine in 22nd Division Venkatachella Pillai Street	45	15	4	

Statement showing the Number of cases admitted and treated in the Corporation Dispensaries during 1926.

Dispensaries.	Date on which institution was opened.	No. of cases treated in		Average daily attendance in 1926.	No. of Malarial cases treated in.		Minor operations performed in		Percentage of Venerial cases treated in 1926.
		1925	1926		1925	1926	1925	1926	
Royapuram Dispensary...	1st July 1924	58561	51290	145·75	3521	3821	324	688	·086%
Washermanpet „ ...	1913	93208	80078	219·39	9789	11082	1546	1541	·06 „
Mannady „ ...	12th Sept. 1923	111099	84256	230·8	15114	12017	1307	1102	·54 „
Mafuzkhan Garden „ ...	2nd Sept. 1923	34593	33620	215·05	9780	8679	432	447	·49 „
George Town „ ...	October 1919	125632	89160	244·27	18079	13329	922	717	·6 „
Mint Street „ ...	2nd Sept. 1923	39706	40614	263·97	8796	7840	847	1136	·18 „
Pulianthope „ ...	14th June 1922	77213	73991	202·71	2312	3666	566	779	·18 „
Baliah Naidu „ ...	10th April 1899	47492	47647	240·53	5078	4580	2440	2470	·69 „
Kilpauk „ ...	21st Nov. 1919	48250	42743	117·07	1710	2456	630	523	·29 „
Nungambakam „ ...	24th Oct. 1923	49183	49592	136	557	558	349	349	·11 „
Chintadripet „ ...	1st May 1909	122356	100497	275	6480	4414	1937	347	·34 „
Triplicane „ ...	1918	118663	50694	138·88	1331	1301	433	400	·42 „
Pudupakam „ ...	1st July 1924	24350	27907	200·4	683	464	438	501	·08 „
Teynampet „ ...	20th June 1921	26714	31234	85·57	350	341	231	256	·13 „
Mylapore „ ...	1st July 1924	66552	81934	224	807	1080	381	540	·18 „

Statement showing the No. of admission and chief diseases treated in the Krishnampet Isolotion Hospital during the year 1925 and 1926.

Diseases admitted.	1925			1926			Remarks.
	Total No. Admission.	Total Death.	Death rate per 100.	Total No. Admission.	Total Deaths.	Death rate per 100.	
Small Pox ...	792	94	11·87	86	5	5·81	
Chicken Pox ...	71	...	...	13	...	...	
Measles ...	33	...	...	15	...	...	
Mumps ...	1	...	...	...	...	...	
Plague ...	1	...	...	...	...	...	
All other diseases ...	29	2	6·89	22	3	30·64	
Diptheria ...	1	1	100·	...	...	...	
Herpes ...	1	...	...	...	...	...	
Tuberculosis ...	3	...	...	1	1	100·	
Malaria ...	3	...	...	4	...	...	
Dropsy ...	1	...	...	...	...	...	
Cholera ...	91	44	48·35	68	36	52·91	
Diarrohea ...	27	7	25·91	38	8	21·15	
Dysentry ...	6	1	16·66	7	2	28·57	
Gastritis ...	1	...	...	...	...	...	
Infantile convulsion ...	1	1	100·	...	...	...	
Enteric Fever ...	...	...	...	...	...	...	
Pneumonia ...	...	...	...	2	1	50·	
Anemia ...	...	...	...	...	...	...	
Fever ...	...	...	...	...	...	...	
Worms ...	...	...	...	...	...	...	
Contacts ...	456	1	21	67	...	...	

Statement showing the number of admissions in the Infectious Diseases Hospital, Tondiarpet, and the chief diseases treated.

Name of Diseases.	1925.			1926.			Remarks.
	Total No. admitted	Total deaths.	Death rate per 100.	Total No. admitted	Total deaths.	Death rate per 100.	
Small pox ...	448	58	15·1	163	21	12·8	
Chicken pox ...	...	...	...	8	...	...	
Measles ...	47	...	...	21	...	...	
Mumps ...	...	...	...	...	...	...	
Plague ...	...	...	...	...	...	...	
All other diseases ...	19	2	10·6	20	2	20	
Diphtheria ...	...	...	...	...	...	...	
Herpes ...	...	...	...	...	...	...	
Tuberculosis ...	...	...	...	3	3	10·0	
Malaria ...	1	...	...	...	...	...	
Dropsy ...	...	...	...	...	...	...	
Cholera ...	156	67	36·4	65	20	30·7	
Diarrhoea ...	53	6	11·3	59	5	8·5	
Dysenetry ...	1	...	...	2	1	50	
Gastritis ...	...	...	...	...	...	...	
Infantile Convulsions ...	...	...	...	...	...	...	
Enteric Fever ...	2	2	100	...	...	...	
Pneumonia ...	4	2	50	...	...	...	
Anaemia ...	1	1	100	...	...	...	
Fever ...	7	...	...	14	3	2·1	
Worms ...	1	...	...	...	...	...	
Contacts ...	150	...	...	62	...	...	

CONSERVANCY.

The Conservancy of the City continued to be under the control of the Health Officer during the year under report. The post of 2 conservancy supervisors and of the Chief Superintendent Cattle depots were removed from the Budget for 1926--27 by the Council. The post of Chief Superintendent had already been vacant since October 1925 and the two conservancy supervisors who were working till March 26 were reverted as Senior Sanitary Inspectors. They however continued to supervise the conservancy work of the two ranges till they were posted for divisional work in July when the conservancy came under the direct charge of the two Range Assistant Health Officers.

During the year 1926 the Council sanctioned the entertainment of 5 Veterinary Assistants for the Conservancy cattle depots. There was already a Veterinary Assistant working in the department. Five Veterinary Assistants were newly appointed and all the six depots were placed incharge of Veterinary men. In addition to these the Council sanctioned at the end of the year the entertainment of a Veterinary Officer on Rs. 80-10-120 with a motor cycle allowance of Rs. 30 per mensem for exercising professional supervision over the depots and Slaughter Houses. The appointment was made in the beginning of 1927 after obtaining the advice of the Veterinary Advisor to Government regarding availablility of the proper candidates etc., for the post.

In the beginning of the year 1926, the Central Gram Depot, where fodder for conservancy animals, such as gram, etc., is stocked and issued to the depots daily was placed in direct control of the Manager on Special Duty in charge of Stores.

There were 15 Sanitary Inspectors and 15 assistants (Process Servers) in charge of the Conservancy of the City at the beginning of the year. Consequent to the appointment of 5 Veterinary Inspectors newly sanctioned by the Council, the 5 Sanitary Inspectors then in charge of the Depots were relieved and posted as additional Inspectors to divisions. There were thus 20 Sanitary Inspectors and 15 Process Servers in-charge of Conservancy during 1926.

In the budget for 1926--27 the Council provided for extra coolies and drivers for Conservancy. The drivers could not be appointed for want of sufficient number of carts and bulls. The extra coolies were gradually employed for the drains and for sweeping the streets so that at the end of 1926, there were 1,276 men 115 women and 59 boys for cleansing streets and drains against 911 men 112 women and 24 boys respectively for 1925.

The details of carts used for conservancy during the year 1926 are furnished below.

For the removal of Rubbish.

Rubbish Carts Single Draught	248
Do. Double do.	36
Do. Trollies do.	81

For the removal of Filth.

Iron Night Soil Carts Single Draught ...	120
Do. do. Double do. ...	11
Trollies (four wheeled)	22

For the Removal of Silt and Liquid Sewage.

Box Carts	48
Sewage Carts (Single Draught)	26

The staff employed in the bullock depots is as follows :—

Depot Maistries	6
Driver Maistries	17
Rubbish Cart Drivers	286
Trolly Drivers	81
Drivers for box carts, Night Soil carts etc., ...	249
Reserve	19

Conservancy Bullocks.—There were 839 animals at the beginning of the year against 944 in the previous year. Of these 297 died during the year under report. 270 new animals were purchased during the year so that there were 812 animals at the end of the year.

Health of Bullocks.—The health of Conservancy bullocks was generally satisfactory except for a severe epidemic of Rinderpest, which lasted for about six months. There was consequently very heavy mortality among the animals. 297 animals died during the year and of these 124 died of Rinderpest. The practice of selling unserviceable bullocks was discontinued since 1924 and the proposal to send them to Pinjrapole was under consideration. Meanwhile all these debilated animals were dying and this contributed to swell the mortality figures. Out of the total 297 deaths, 109 died of old age and debility. Thus the animals which should otherwise have been disposed of during the 3 years 1924 to 1926 had their natural end in the Corporation. This has to be taken into consideration in judging the mortality figures. But for this and the prolonged existence of Rinderpest in the City, the health of the animals would have been very satisfactory with very few deaths. Owing to the large number of deaths occurring in the depots there were heavy shortages in the working complement of bulls and consequently the remaining animals had to be overworked now and then and Conservancy work managed with great difficulty.

*Other infectious Diseases*s—There was one death from Anthrax in "C" Depot in March 1926 and one in "E" Depot in April 1926. Luckily the disease was checked at the outset and it did not spread. There were 20 deaths from Tuberculosis.

Conservancy Carts.—During the year 40 single Draught rubbish carts, 10 iron lorries 6 hand carts and 10 trollies and 324 buckets were manufactured. In addition to these 10 hand drawn box carts of the pattern used by the Works Department for carting metal were also manufactured.

Conservancy Labour.—There has been no strike during the year, but there has been always a tendency among the coolies to strike for any slight causes. For instance when there was a short delay in paying their annual increments they threatened to strike. The labour problem here has been as difficult as it has been in other parts of the world and in other spheres of activities. The scavengers are a peculiar class of people. Their general uplift and education is not keeping pace with the rest of the labour classes, and naturally they continue to be the same rigid and irresponsible class of labourers. It is not an easy task to extract work from them to the extent they are expected to work. Until they are educated sufficiently to realise their responsibilities in the discharge of their duties, it will be difficult to economise conservancy and put it on a satisfactory basis.

There are still certain grievances felt by them and the Corporation has to remedy them as early as possible. The most important of these is lack of housing accommodation to a large number of scavengers. The Corporation has no doubt been sympathetic enough to provide funds for constructing model lines year after year, still there are not enough houses for the scavengers. In some of the existing lines, the houses are overcrowded as two to three families manage to live in each. It is of the utmost importance that a large sum of money should be provided for building sufficient number of huts for all the Municipal scavengers at reasonable distances from working areas.

Rice transactions.—The sale of rice to menials at 4 full measures per rupee was continued during the year. The details of the transactions are given below.

Balance of stock on hand on 31-3-26	M. 1400½	Rs. 452-3-11
Purchased during the year... ...	494248	Rs. 1,38,134-14-0
Total ...	495648½	1,38,587-1-11
Issued during the year ...	495459½	1,38,534-4-5
Balance ...	189	52-13-6
Loss sustained in the transactions ...		13355-4-5
Amount realised ...		125179-0-0

Motor vehicles.—There were 12 petrol lorries, 2 steam waggons and two Fordson tractors with 4 trailers at the beginning of the year. Lorry No. 3 which was one of the oldest lorries of the Special Malaria Department and which was lent to Works Department in 1922, was returned to Health Department for conservancy work in July 1926. 3 Steam waggons and 5 Ford lorries were newly purchased during the year. The practice of conveying meat from the slaughter houses by means of Motor vans was discontinued from the beginning of April 1927 and the two Ford vans used for the purpose were converted as rubbish lorries and detailed for conservancy work. Thus there were at the end of the year 27 motor vehicles on the list in-charge of conservancy section out of which one was condemned as unfit for further use. Out of the remaining 26, 4 lorries are more than 10 years old and 4 are 8 years old. Lorry No. 14 (Renault) was lying idle even during 1926 as the necessary spare parts could not be obtained. The proposal which started in 1924 to centralise the motor vehicles of the Corporation and to place them under a single officer did not materialise even during the year under report as it was still pending the decision of the Lorry Fleet Committee.

Motor Lorry Tipping Platforms.—The following tipping platforms were continued during the year.

1. Andiappa Mudaly Street, 2nd Division.
2. Near "A" Depot.
3. Near "B" Depot, 4th Division.
4. Motor lorry station, 13th Division.
5. Langs Garden Pumping Station, 20th Division.
6. Pachiappa Chetty Street, 24th Division.
7. Muhammadan Garden Aziz Mulk, 22nd Division.

The tipping platform at the Napier Park Pumping Station was discontinued in July 1926 on complaints from residents in the neighbourhood. Owing to want of bullocks and sufficient number of carts for nightsoil removal all the nightsoil carts of 10, 11, 12 and 13 divisions were replaced by buckets during the year and a motor lorry was detailed to remove them.

Removal and disposal of rubbish.—3,84,655 cartloads of rubbish were removed during the year against 3,86,159 in the previous year. Of these 73,769 cartloads were received for incineration at the two big incinerators at Basin Road and Krishnampet and at the Otary small incinerator. 50,037 cartloads of rubbish burnt and the rest dumped in Korukupet, Otary and Mylapore dumping grounds. 5,686 cartloads of earth and ash were sold to private parties during the year. The reclamation of the Railway land near Basin Road Incinerator continued during the year and the reclamation of the Railway Triangle in Washermanpet was completed during the year. The mounds at Krishnampet Incinerator are growing. There are no Corporation lowlands near the incinerator and there are no lorries for conveying the earth from the incinerator to distant lowlands in the outskirts of the city. There are lowlands belonging to private parties in the vicinity of the incinerator which can only be filled up on payment of cost by the owners. But the rates charged are too prohibitive to enable the parties to undertake the work. The only way of disposing off the mounds at the incinerators is by undertaking the reclamation of lowlands near the incinerators on payment of only a nominal cost which should be just sufficient to defray the actual running expense of the lorry. Proposals for adopting this procedure are before the Standing Committee (Health).

Disposal of Filth.—The Pail Depots at Ice House Road, Langs Garden and DeMellows Road Pail Depot continued to work during the year. 121160 cartloads of filth was removed from the city of which 73429 cartloads were flushed in the Pail Depots and the rest trenched at the Korukupet and Otary Nightsoil Depots. The small flush-out depot in Singara Garden was opened during the year.

1078 carcases of animals were buried in the dumping grounds at Korukupet, Otary and Mylapore.

943 Gallons of Hycol and 3814 parahs of chunam were used during the year for disinfecting drains and streets.

Private Scavenging.—The problem of taking over the scavenging of houses under the control of the Corporation was still pending before the Private Scavenging Problem Committee appointed by the Council. This is a serious problem requiring speedy attention of the Corporation. Some of the mofusil municipalities have undertaken this work with advantage. At present the whole work is under a few capitalists among the scavengers who employ their own staff for doing the work. By undertaking the work, the Corporation will not only be helping the residents of the City but also the actual labourers who are now getting only a minor share of the profits derived by their relentless masters.

Side by side with this, the question of introducing water closet system in the case of house latrines should also be kept in view, and the present insanitary system of removing filth by hand with baskets and winnows has to be discontinued as early as possible and the residents of the City placed less at the mercy of the scavengers.

Public Latrines.—There were 182 latrines in the City of which 89 were flush-out 50 masonry and 43 sanded. 4 sanded latrines in Ghouse Mohideen Street, 1st Division, one in Old Slaughter House Road, 2nd Division, masonry latrines in Maddalan Street, 10th Division, one in Wall Tax Road, 13th Division, one in Halls Garden, 22nd Division, sanded latrines in Cox Cherry, Masonry latrines in Pullianthope and Napier Park and sanded latrine in Kosapet were converted into flush-out ones during the year. 7 flush-out latrines and 2 masonry latrines were newly constructed during the year.

Combined flush-out latrines and urinals were constructed at the following places:—

1. Near Royapuram main controlling station at the approach of the Royapuram Bridge.
2. Royapuram Electric Stores.
3. At the junction of the Ice House Road and Shaick Dawood Street.
4. At the junction of Harris Road and South Cooum River Road.
5. Dharmaraja Koil Lane, 10th Division.

6. Annapillai Street, 8th Division, combined flush-out latrines and bathing fountains were constructed at the model lines, Cochrane Basin Road 4th Division and south of Ashtabujam Road, 17th Division.

To minimise the evil caused by the committal of nuisance by the public on the sides of streets a number of U shaped drain urinals connected to the sewers were constructed in busy places so that the urine might flow into the drains and not soak on the ground giving offensive smell. This was started as an experimental measure. These urinals are cleaned by the conservancy staff when they attend to the cleaning of the streets. On experience it is found that the system requires improvement. Now the urinals are open to the public view and they have to be screened. A tap has also to be put up and the urinals must have intermittent flushing arrangements. It is only when all these are done, the urinals can be said to be satisfactory from a sanitary point of view.

Malaria.—The cleaning of the Anti Malaria drains of 4th, 16th, 17th and 18th Divisions was stopped during 1925-26 as the provision in the Budget for the special staff engaged in that work was removed by the Council. It was started during 1926. provision having been made for it by the Council. A special gang of 24 coolies were entertained and put on the work and the whole drain is being thoroughly and systematically cleaned. The tanks in the Zoo, Young Womens Christian Association and Gangadeswarar Coil were cleaned during the year.

Domestic wells in George Town, were considered to be one of the chief sources of breeding mosquitoes. A systematic survey of these wells in the City was commenced in February 1926, and upto the end of December 1926, 6,558 wells were inspected in the first fifteen divisions. A small gang of fishermen and coolies was engaged for doing the surface cleaning and introducing fish in wells containing malaria larvae. In 6,458 wells fish was introduced and 907 wells cleaned during the year.

At the time of writing the report, a special Malaria staff is engaged in carrying out general Anti-Malarial operations in the city by cleansing and petrolising all the drains, cesspools, silt traps, etc., public tanks and wells, introducing fish into tanks and wells, cleaning prickly pear and rank vegetation, cleaning and petrolising private tanks on recovery of cost from the owners. The Government has been notified to carry out Anti-Malarial measures in respect of Cooum and Buckingham canal vested in them.

The problem of removal of filth by the least objectionable method is becoming more and more acute. As was pointed out in the previous reports, the method of collecting the filth in buckets placed at regular intervals and their removal by motor lorries is giving rise to objections in some localities. This system is however, decidedly better than the nightsoil carts. Residents have sentimental objection to the existence of nightsoil bins in the street constantly, though loaded bins are removed morning and evening and only empty bins are allowed to remain. In some localities bullock iron lorries are used for removing the buckets altogether from the street after 9 a.m. and 4 p.m., every day. The only solution for this problem is to introduce flush-out latrines in houses as speedily as possible.

Conclusion.—As has been mentioned above, the supervision staff in conservancy has been very much curtailed. Till 1924 there was a conservancy officer, two supervisors and a highly paid Chief Superintendent. All these were removed by 1926. The whole conservancy work was added on to the Assistant Health Officers, who were already saddled with multifarious duties. To facilitate the work of supervision by the Assistant Health Officers, the santitation and conservancy branches of the work were combined recently and placed in-charge of a Sanitary Inspector for each division. But practical experience in the past has been that for efficient conservancy, these two branches of work should be separate. It is therefore imperative that a whole-time officer of the grade of Assistant Health Officer should be appointed and placed incharge of the entire conservancy work with a separate staff of Inspectors etc.

HEALTH EXHIBITION.

The National Health and Baby Week celebrations were conducted in the South Indian Athletic Association grounds and premises, Peoples Park, from the 14th to the 20th January 1926. The Health Exhibition was in our charge and the Baby show portion was in the hands of the National Baby Week Committee. The Corporation was pleased to sanction a sum of Rs. 3,500 for getting up the exhibits at their meeting held on 28th November 1925. Out of which amount a donation of Rs. 500 was paid to the National Health and Baby Week Committee, a sum of Rs. 800 to the Lady Superintendent for exhibiting the child welfare work done by the Corporation which she undertook to do under the auspices of the Baby Week Committee thus leaving a balance of Rs. 2,200 solely for the Health Exhibition.

A number of charts and models prepared under our supervision together with those obtained from Government and private gentlemen (for whose valuable assistance we feel grateful) were exhibited.

The Health Exhibition and the Baby Show were announced to the public by big posters placarded prominently throughout the city sufficiently in advance.

Picture posters in English, Tamil and Telugu on Mosquitoes, Malaria, Small pox and Vaccination, Flies, Plague, Relapsing Fever and Lice supplied by the Health Propaganda Board were put up throughout the Exhibition grounds.

A number of leaflets relating to matters connected with personal and public health were distributed broadcast to the public during the whole period of Exhibition and after every evening's lecture or demonstration. The Health Propaganda Board and the Director, Ankylostomiasis campaign had also sent a number of leaflets for similar distribution which were likewise distributed.

The models and exhibits were arranged in a series of pandals and tents on the grounds in such a way as to avoid overcrowding in any one particular place. The interesting exhibits and models were arranged in a number of spacious sheds while a great number of the charts rendered in Tamil were similarly fixed up in serial order according to a particular subject or disease.

They were intended to show up in a manner that could be easily understood even by the lay people, the various insanitary and unwholesome conditions which bring about the spread of specific diseases or infections amongst human beings and the most important methods of preventing the same. Each set of charts dealing with one disease or subject was made as complete by itself as possible: and almost all the charts and pictures were self-explanatory containing explanations both in English and in Tamil. We had thus in all about one thousand such posters, specimen, and models.

In addition the Sanitary Inspectors, the Medical Inspectors of Schools, the Medical Registrar-Vaccinators and a few Medical Officers of dispensaries were put in charge of each sub-section and they explained the several charts, exhibits etc., to the visitors.

The exhibits were arranged as follows:—

Physiology: (*a*) A series of models and diagrams showing the human body, the different organs, their structure etc.

Snakes: Model showing the fang of the poison gland in the mouth of the cobra and different kinds of poisonous snakes.

Intestinal Parasites: Actual specimen of round worms, hook worms, tape worms, thread worms, whip worms, etc.

Models showing various stages of small pox, chicken pox, measles and the progress of a case of vaccination.

Disease carrying insects: Mosquitoes conveying Malaria, Filaria, Yellow Fever, Dengue etc.

Fleas: rat and human.

Lice and bugs.

Flies:

Water: A model of purification of water from Adyar, Infiltration gallery, gravitation filter model of the Madras Water Supply and its distribution, domestic filters, Pasteur Chamberlain filter, Berkfield filter, Hygienic household filter, etc. Boulton's water elevating machine, Jewel filter, well protected tanks and wells etc.

Meteorology: Hydrometer rain gauge, Aenememometer.

Dwellings: There were very many models representing good and bad dwelling houses showing arrangements for lighting and ventilation.

Drainage: Several types of water closets, underground drainage system, septic tanks, drainage connections, modern water carriage fittings, a model of the Madras Drainage system etc.

Refuse Disposal: Rubbish carts, night soil carts rubbish bins, (domestic and public) hand carts, incinerators, Pail Depots, sewage farms, conservancy depots etc. Electrocuting lethal chamber (stationery), electrocuting motor car.

Latrines: Various types of latrines ordinary two seater type, flush-out type, public latrines combined with septic tank system etc.

Cow houses and dairy farm.

Markets-sanitary and insanitary types of markets of various designs showing those intended purely as vegetable and mixed ones.

Hospitals: Models showing the newly constructed hospital at Tondiarpet.

Slaughter House: A model showing a simple type and a sanitary mutton van.

Disinfection: Practical disinfection and disinfectants.

Sanitary fittings: Latest sanitary fittings domestic and general.

Crematoriums: Models explaining the relative advantages of covered and open ones especially the types in use in the western countries.

Models to explain the utilisation of local tank water for public purposes.

Poster Section.

Air: Ventilation natural and artificial.

Water: Source of water supply, selection, storage and distribution. Impurities of water, the ways and means of pollution, effect of drinking impure water, purification of water filters etc.

Food: The nature and use of foodstuffs.

Soil, sites and buildings: Dwelling houses, sanitary and insanitary.

Disposal of refuse and excreta.

Dental Hygiene—care of teeth, artificial teeth etc.

Child welfare.

School Hygiene.

Personal Hygiene—drinking, sleeping, washing, bathing exercise etc.

Infection and disinfection—Anthrax, cholera, malaria, filaria, plague, small-pox, vaccination, tuberculosis, leprosy, mosquitoes, flies, fleas, lice—their life history and their modes of propagating disease.

Intestinal parasites: Ankylostama. Thread worm, round worm tape worm, whip worm, their life history, and modes of propagating infection.

Vital Statistics.

First aid.

Temperance:

The Health Exhibition was open daily from 7 a.m., to 6-30 p.m., on all days commencing from the 14th till the 20th January 1926.

The programme that was gone through during the week is herewith put up.

PROGRAMME.

14th January 1926.	4-25 P. M.	Opening of the Exhibition by H. E. The Governor.
15th January 1926.	4-30 P. M.	Ambulance Competition-Judge, The H'onble Rao Saheb Dr. U. Rama Rao.
	5 P. M.	Sword Play.
	6-15 P. M.	Magic Lantern Lecture, Disease bearing insects- by Major A. J. H. Russel, M. A., M.D. D.T.M., D PH., I.M.S., C.B.E., President—The Hon'ble Raja of Panagal
16th January 1926.	3-30 P.M.	Sports amongst Corporation School boys.
	6 P.M.	Magic Lantern Lecture-Medico Dental Inspection of School Children-by Dr. H. Venkata Rau, L. M. & S. President :—M. R. Ry. Dewan Bahadur V. Tirumalai Pillai Avl.
17th January 1926.	4-45 P. M.	Wrestling.
	6-15 P. M.	Magic Lantern Lecture-Modern Methods of Combating Tuberculosis-by Rao Bahadur Dr M. Kesava Pai, B.A., M.D., C.M. President :—The Hon'ble Sir C.P. Ramaswami Iyer B.A., B.L., K.C.I.E.
18th January 1926	9 A.M. to 3 P.M.	Gosha day.
	4-30 P. M.	Physical Exercise Demonstration by H. C. Buck Esq., M.P.E. Lecture-Physical Exercise in relation to health by H.C. Buck Esq., M.P.E. President:—The Hon'ble Khan Bahadur Md. Usman Saheb Bahadur, B.A.
19th January 1926	4-45 P. M.	Baby Show.

6-15 P. M. Cinema Show, on Malaria and Hookworm by Doctors J. F. Kendrick and P. Sadasivan.

President :—Major-General T. H. Symons, O.B.E., C.S.I., I.M.S.,

20th January 1926 4-30 P. M. Sports amongst Corporation School girls.

6-15 P. M. Magic Lantern Lecture-Cholera and other water borne diseases by Dr. C. S. Govinda Pillay, M.B., Ch. B., L.R.C.P. & S.L.F.P.S., D.P.H. (Edin.)

President :—M. R. Ry. Dewan Bahadnr J. Venkatanarayana Naidu Garu, B.A., B.L.

The exhibition is the third of its kind held by us on a large scale and it is hoped that it will continue to be an annual function in future.

Including Their Excellencies, who took a keen interest in the Exhibition as a whole the visitors attended by hundreds from morning to evening and showed a very lively and enthusiastic interest. The rush of people was not only from this city but even from the outlying moffusil stations, who came all the way to have a look round the exhibition. This was very gratifying. There is no doubt that the public for whose benefit the celebrations were organised., benefitted a great deal by visiting the show. The crowd in the evening was so great that in spite of the help rendered by the police and the Boy Scouts our staff found it difficult to control.

The poster procession in which the children of the Corporation Schools took part which heralded the opening of the Health Exhibition and the sports amongst the Corpration School Children, boys and girls were much appreciated.

With the experience gained during the previous two years, this time a decided advance was made whereby all the show was conducted in the spacious booths and tents all arranged in a serial order to accommodate the various spheres of activity in regard to health: so that the public were the least inconvenienced unlike in previous years.

Several private firms volunteered to help us during the week. The Premier Indian Scientific Co., brought down and exhibited all their physiological and scientific models for demonstration, at great risks to themselves. Messrs. Lakshmi Ratans Ltd., at a heavy cost had in a beautiful glazed tiled hall with fire-proof flooring, and decorated ceiling fixed up the various sanitaary fittings neatly arranged, and demonstrated their use throughout the week. Our thanks are especially due to them for the heavy sacrifice they have made at my request. The Director of Industries was, as in last year, kind enough to put up the pumping plants used in anti-malarial operations. Messrs. Oakley Bowden & Co., with their auto clowns and fine health placards attracted the visitors, for their shed was very finely decorated and it looked really a white specimen of Little's House of Health.

Dr. A. Lakshmipathy had put up three spacious sheds showing therein the children's apartment, the delivery and maternity room and the General Hospital at it existed in Ancient India. The original quotations and copious notes from old Hindu Scriptures furnished much thought for the visitors about their old culture as compared with the latest.

The Christian Literature Society and the Thesophical Publishing House, Adayar, had both two tents where books on health were sold to the public. The Madras Health Council and the Boys Scouts were also busy throughout the season, the former by distributing the leaflets on health and the latter by their ready service. The Opthalmic Hospital and the Tuberculosis Institute equally contributed to the success of the exhibition by their charts and models. The rest of the tents were occupied by the Baby Welcome, the Child Welfare Scheme, the Maternity Hospital and the Red Cross Society, in addition to a few sheds in possession of the firms who had put on show their patent goods.

I am much indebted to the help rendered by my assistants and staff and also the Secretaries of the South Indian Athletic Association who had kindly placed the grounds at our disposal.

In conclusion I commend for appreciation the valuable services rendered by all the members of the Health staff and Mr. K. Srinivasa Iyengar in particular, whose devoted and unsparing services throughout the season were invaluable for the success of the Exhibition.

K. RAGHAVENDRA RAO,
B.A., M.B. & C.M., (*Madras*), *D.P. H.*, (*Camb.*)
Health Officer.

HEALTH EXHIBITION.

January 1926.

Amount sanctioned by the Council Rs. 3,500. on 28th November 1925

	Vr. No.	Particulars.	Amount.	Amount.	Remarks.
			Rs. A. P.	Rs. AS. P.	
1	...	Amount sanctioned by Council for Exhibition & Baby Show ...	3,500 0 0	...	Sanctioned by Council on 28-11-25
2	...	Contribution to Baby Week Committee ...	...	500 0 0	Distributed by Commissioner on 4-12-25.
3	...	To Lady Superintendent C. W. S. ...	...	800 0 0	
4	...	To Health Officer for Exhibition ...	...	2,200 0 0	
		Total ...	3,500 0 0	3,500 0 0	

Details of Expenditure for Health Exhibition 1926.

No.	Date.	Particulars.	Amount.	Amount.	Remarks.
			Rs. A. P.	Rs. A. P.	
1	4-12-25	Amount allotted for Health Exhibition 1926 ...	2,200 0 0		
		Paid towards painting S. W. D. models ...	...	30 0 0	
		Contingent Expenditure ...	...	60 5 0	
		Do. do. ...	...	80 14 0	
		Cost of vessels purchased for Sports ...	...	125 4 0	
		Paid towards costs of charts & models ...	...	200 0 0	
		Cost of 3 flush out latrines constructed by S. W. D ...	...	83 14 9	
		Store articles ...	...	34 4 3	
		Charts purchased from Messrs. P. R. Rama Iyer & Co. ...	...	8 14 8	
		Cost of conservancy arrangements ...	...	59 2 8	
		Models, making and miscellaneous ...	...	167 2 10	
		Total ...	...	849 14 2	
		Savings ...	...	1,350 1 10	
		Grand Total ...	2,200 0 0	2,200 0 0	

ANNUAL REPORT ON THE WORKING OF THE CHILD WELFARE SCHEME, CORPORATION OF MADRAS, FOR THE YEAR 1926.

In submitting the 9th Annual Report on the working of the Child Welfare Scheme in the city of Madras, I have to record with feelings of deep gratification the steady and satisfactory progress achieved in its several activities during the year under review. The steadily growing appreciation by the public of Madras of the invaluable benefits of the free maternity service rendered by the scheme, in particular to women belonging to the wage-earning classes, whose husbands lack the finance necessary to engage the services of qualified private nurses, is clearly reflected in the statistics of work performed, which represents a distinct increase in comparison with that done in previous years. In order to ensure that the public derive the maximum possible benefit from the scheme, free distribution of milk to infants whose parents are too poor to procure this essential nourishment is an indispensable requisite, and the present popularity and utility of the centres is due in a very large measure to the free distribution of milk to deserving cases. In spite of shortage of funds which seriously hampers the further development of its activities and its progress towards the goal of highest efficiency, the scheme has succeeded to a remarkable extent in satisfying the ever increasing demands on its service, and has come to occupy an important place in the life of the poorer communities.

While making these observations I think it necessary to refer to one or two factors which are hindering the normal expansion of work. In the first place I have to refer to the proposal for the establishment of two new centres, one at Perambur, and the other at Egmore, to provide increased facilities for affording medical assistance to the residents of these divisions who are compelled under the existing arrangements to go to Purasawalkam Centre for any treatment they may require. The proposal

CHILD WELFARE SCHEME.

STAFF.—1926.

if sanctioned will, by reducing the jurisdiction of the Purasawalkam Centre enable the staff to concentrate their effort on a much smaller area with better results. The opening of these two centres will not only considerably enlarge the sphere of usefulness, but will also provide for prompt medical attendance. In view of the urgent need for an immediate expansion, it is earnestly hoped that the Council will see its way to accord its sanction to the proposal before the close of the current year.

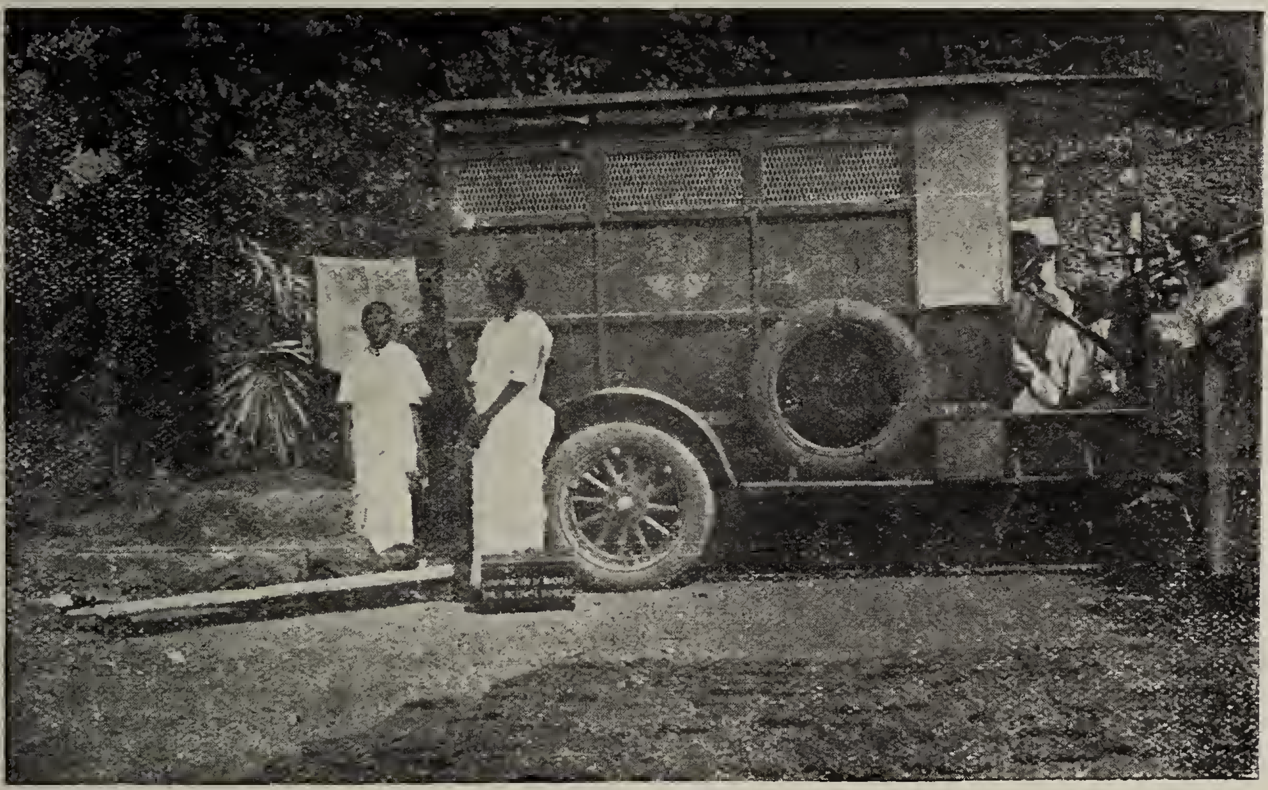
Another very pressing requirement of the scheme which is adversely affecting the efficiency of the service, is the absence of an adequate leave-reserve of doctors, Health Visitors, Nurses, and Peons, to relieve the members of the regular executive staff attached to each centre, who are compelled by sickness or other causes beyond their control to take leave for shorter or longer periods. Under the existing system, whenever a Lady Doctor proceeds on leave, the Doctor-in-charge, of a neighbouring centre is ordered to attend to the professional and executive work of the absentee in addition to her legitimate official duties. It will be readily admitted that the inevitable consequence of such arrangements is that on days the Lady Doctor visits the centre of the absentee, there is disorganisation of work in her own centre. In the light of these remarks, the question of creating an adequate leave-reserve acquires new significance and importance in view of the solemn responsibility resting on the scheme as the sleepless guardian of infant life in the city of Madras. Detailed proposals have already been submitted by me supported by statistics for the creation of a leave-reserve sufficient to meet the normal requirements of the staff in the matter of leave taking, which I trust will receive the due consideration of the authorities.

Telephone.—Another urgent need of the scheme is the restoration of the telephone service. Ever-since the inauguration of the Child Welfare Scheme, the want of proper means for communicating information regarding the condition of patients to the Lady Superintendent and Lady Doctors, and obtaining prompt instructions for the guidance of the staff was keenly felt, and the installation of the telephone service in 1922 at the several centres and at the residence of the Lady Superintendent was an invaluable asset for the progress of the work of the scheme. But unfortunately the telephone connections were removed with effect from 31-3-1927 in pursuance of a resolution passed by the Council at its meeting held on 30-3-1926.

The measure of the utility and value of a free maternity service is the speed and promptitude with which it is able to respond to public calls for assistance, and a telephone service by establishing such connections between the staff at the various centres and the Superintendent facilitates the issue of orders and instructions without delay, and helps in the timely assistance that is so essential in emergent cases. Further experience has demonstrated that the telephone is of the greatest service for requisitioning the motor ambulance for speedy and safe conveyance and admission of serious cases into hospitals. It often happens that members of the public out of ignorance phone to the Superintendent for advise and instruction as to the procedure they have to adopt to secure timely maternity service, and they have to be told promptly what they have to do under varying circumstances.

Besides the above advantage the telephone enables the Superintendent to keep in touch with the work at the several centres which only too often work understaffed on account of the absence of one or more nurses from duty. In a hundred different ways, a telephone service contributes to the maintenance of a high level of efficiency and promptness in the despatch of work. It is no exaggeration to say that the discontinuance of the telephone connections has deprived the scheme of a very useful instrument of service. The savings that may be effected by the removal of the telephone may be stated without exaggeration to be trifling compared with the immense loss in efficiency and the inevitable dislocation of work which is bound to occur. The advantages resulting therefore from the continuance of the telephone service are immeasurable and far outweigh the small expenditure.

CHILD WELFARE SCHEME.



Motor Ambulance Car.

CHILD WELFARE CENTRE.

Prematernity Clinics.

CHILD WELFARE CENTRE

Milking the Cows under our supervision.

CHILD WELFARE CENTRE.

Distribution of milk to needy infants.

I would therefore earnestly request the Council to reconsider the step taken by them in withdrawing the telephones which is, so far as the scheme itself is concerned a retrograde step.*

Milk Depots.—As time goes on it is becoming increasingly evident that the free supply of milk to needy infants proves to be one of the most efficient means of tackling the problem of infant welfare in this city. Till the end of March 1926, milk was supplied at four centres only, viz., Triplicane, George Town, Purasawalkum and Washermanpet. The Council having however agreed to extend the supply of milk to the other four centres, arrangements were made for this purpose from July being given at this centre from 4-4-27). 557 babies received milk 1926, except in the case of Muthialpet where milk could not be procured either in a pure state or at reasonable prices. (Milk is as against 551 during 1925, with an average daily attendance of 355 as against 390 of the previous year. Milk was issued under special care and circumspection and not much attention was paid to adding to the total numbers. Some children had to be kept on milk food for longer periods than at first proposed, and new admissions could not be made on account of restrictions put upon the daily supply at each centre on grounds of economy. For the orders were that milk had to be supplied at all the centres within the budget grant which was the same as for 1925-26 when milk was supplied at four centres only. When suddenly the scope of milk depots was extended a certain amount of dislocation of past arrangements was inevitable, with the result that there has been a good deal of dissatisfaction at the old centres where certain mothers who were fondly expecting the continuance of milk as freely as before had to be stopped, whereas at the newer centres, the number of infants coming up daily had to mount up slowly as the news of milk supply spread amongst them. The disappointment amongst them is bound to be all the more in the current year as the daily supplies have had to be further cut down and greater restrictions placed on new admissions consequent on the very inadequate allotment, which is about half of the budget grant for 1926-27. I may be permitted to state that no amount of money spent for milk on behalf of infants can be called a waste. A supply of free, wholesome milk is of far greater importance than that of pure water. What the infants of the country are in need of is sound nutrition and sound nutrition depends on the availability of good milk both in quality and quantity. The demand for milk on behalf of starved, poorly fed and ill-nourished babies is so great that one feels that the need is so very great and necessary. I appeal to the authorities to view this aspect of Child Welfare work in a more philanthropic spirit and at least restore the original grant.

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* *Since writing the above I am glad to state that the Council re-considered their original resolution and sanctioned the fixing of Telephones to all the centres*

Health Visitors.—

The total number of Health Visitors for the whole scheme is 22, which is very inadequate, and, when some of these owing to sickness and other unavoidable circumstances are compelled to take leave for shorter or longer periods, there is difficulty in securing suitable substitutes as the number of trained Health Visitors are few. Often it happens that senior nurses have to be appointed as Acting Health Visitors till the permanent hand returns from leave. A few of our experienced Health Visitors resigned to better their prospects elsewhere, and their vacancies had to be filled by probationers. Such haphazard arrangements naturally affect the work at the centres. One of the most important functions performed by the Health Visitors is to register expectant mothers and to maintain continuity of visits to mothers and children for observing and studying the conditions of their social life and well-being. She gives practical instructions and advice to expectant mothers as to how to preserve their health, and prevent serious affections caused by indiscretion in diet etc., during the period of pregnancy. Young and inexperienced mothers are also taught how to take care of the health of the new born baby. The Health Visitor who is charged with this responsible duty of educating women in mothercraft does really valuable propaganda work carrying the light of knowledge into hundreds of homes where precious infant life is daily sacrificed on the altar of ignorance and prejudice. It is her patient, unostentatious, educative propaganda that has helped to make the

Centres so popular, and has enabled many thousands of poor suffering women and children to seek the help of the mid-wives and doctors of the scheme.

The total number of visits paid by the Health Visitors in 1926, was 90672 as against 89857 in 1925, and the total number of prematernity cases registered in 1926 was 6269 as against 6062 in 1925.

While there is a steady increase in their out-turn of work there has been no corresponding increase in their numbers. The number of Health Visitors has continued to remain at twenty-two for over three years, and to make matters worse, some of them resign and go away every year after gaining considerable experience at our cost. It has been repeatedly urged in previous reports that their number should be increased at least to thirty on the basis of one Health Visitor for each municipal division and at the same time that their pay and status should be improved so that they might have a full tenure of service under the Corporation. I take this opportunity to urge upon the Corporation once again to give the matter their careful and sympathetic consideration.

Health School.—

The training of Health Visitors has been a branch of the Child Welfare organisation since its inception. Till July 1922 the training was limited to mid-wives who had taken service under the Corporation and they were promoted as Health Visitors after a year's training under the Corporation itself. They did not receive any certificates then. From July 1922 a regular school was constituted at the instance and under the auspices of the Madras Presidency Maternity and Child Welfare Association, and a Board of Examiners who were empowered to issue certificates was also formed. The candidates who undergo training as Health Visitors continue to be few in number, varying from three to six a year, two of whom are sent annually by the above association with a stipend of Rs. 50 per mensem. The others are recruited from the Corporation service. Soon after passing these are permanently taken as Health Visitors in the Corporation. The candidates sent by the Madras Presidency Maternity and Child Welfare Association are employed by them in one or other of the Baby Welcome Centres as far as I am aware.

During the year under review five candidates were admitted for training including the two who were referred for an additional course in some subjects. It is gratifying to note that all of them have secured a pass in the final examination held in May 1927. The Health School has been a most important and useful branch of our activities and the demand for the services of trained Health Visitors has been on the increase. But unfortunately the demand could not be met for want of suitable facilities for training more candidates. It is understood that the Government are proposing to start a fully equipped Health School, and, if it should materialise, the question for consideration will be whether the school now run by us should not be affiliated with the Government School. In any case, the Health School has become an absolute necessity and requires expansion and better equipment, to meet the numerous demand for trained Health Visitors.

The staff of the Child Welfare Scheme record their grateful thanks to the Madras Presidency Maternity and Child Welfare Association for all assistance rendered in this connection, and for remuneration paid to the lecturers and Examiners as Honoraria.

Midwives.—

The midwifery practice of the scheme is carried by a staff of fifty-six midwives. They attended to 8253 labour cases in all last year as against 8294 in 1925 and the total number of visits paid by them rose from 90027 in 1925 to 90813 in 1926. There was a slight decrease in the total number of cases attended to last year which I attribute to the decrease in the general birth rate of fact that it had to work without its full complement of nurses and Health Visitors, off and on during the year. Unless the the city, and to the fall in the number of cases at Washermanpet

Centre, during the year which, however is almost made up by the increase in other centres. The fall in this centre is due to the number of midwives is increased it would be difficult for the present staff, which is already overworked to undertake more cases. A good deal has been said about the unsatisfactory work of the midwives. I would unhesitatingly state that the work which they have been carrying on under great limitations, and under most trying circumstances often having to go out alone in the darkest nights to areas inhabited by undesirable people, and in the worst conditions of weather, has nevertheless been very satisfactory and commendable. Although in the past it was difficult to attract suitable women, it is gratifying to note that during recent years there has been a satisfactory response. In the interests of the work it is important that the staff is contented and happy and that their personal safety and welfare is assured in the discharge of their difficult duties; it is also fair that the conditions of service for the midwives in the child welfare scheme should in no way be harder than it is for those employed outside the scheme. The rates of pay for midwives are much lower in the scheme than those which obtain outside. Conditions of life in the city, are quite different from what obtains in the moffusil, and on all grounds they should be started on a better scale with prospects of reaching a maximum of Rs. 80 per mensem. In fact Health Visitors and midwives trained under the Delhi Scheme are far better off than our Health Visitors and midwives. I would also point out that it is usual for every institution which employs midwives to grant a uniform allowance. Proposals were put up in the past for sanction in this behalf but were negatived. I appeal once again that the Corporation may find ways and means for sanctioning this small request.

Lady Doctors.—

Eight Lady Doctors continued to work during the year. There was an appreciable increase in the total number of visits paid by them to the houses, which was 8737 for the year under review as against 7124 in 1925. In addition to this work they undertook the treatment of 1568, morbid cases as against 1288 in

1925, at the homes of the patients. The out-patients clinics for the mothers and children held in the mornings at the various centres continued to be very popular, the attendance having risen from 105363 in 1925 to 114814 in 1926. In this connection I may be permitted to say that the work of a Lady Doctor in the Child Welfare Scheme differs from that of Lady Doctors ordinarily in Government or municipal employ. Child Welfare work in a large city such as Madras necessarily involves a combination of educative and social work, amongst the poor, the ignorant and the depressed classes who are often averse to accept even what is good for their own welfare. Further the medical work which is easily done by the student of medicine in a hospital and which he finds so much pleasure in carrying out successfully involves in the case of the Child Welfare Staff, responsibility and anxiety which only those who do it in a poor and insanitary home can realise. Often it happens that no sooner a patient is carried over the most dangerous complications by the best efforts of the Child Welfare Staff, than she or her relations suddenly take a directly contrary view and adopt methods not in the least favourable to the patient's health or welfare. To make matters unpleasant the staff is blamed despite their good intentions. Nevertheless, the work of the Lady Doctors has been very satisfactory. A scrutiny of the results of the work of the Child Welfare Scheme for the year under review by any authority on the subject is sure to give satisfaction to all. The maternal mortality rate for the scheme for the years is 0·7 and compares favourably with the rates of other cities in the world. The infantile mortality rate of 181 per thousand live births undertaken by the scheme also compares favourably with the general city rate of 279 for the year. Besides all this the beneficial results brought about by the work of the Lady Doctors towards the welfare of mothers and children cannot be measured by statistics alone. The best evidence is the ever-increasing number of mothers and children who seek the aid of the Child Welfare Centres, year after year and it would be of the greatest assistance, if one or two more could be added to the number of Lady Doctors. I take this opportunity of mentioning that the grade of salary of the Lady Doctors in the Child

BABY SHOW.—1926.

BABY NARAYANASAWMI.

(The best baby in the show).

(*The Madras Mail*).

Winner of the Governor's Challenge Prize.

Walfare Scheme compares very unfavourably with that obtaining in Government Institutions, and I request that at least the original scale of pay starting with Rs. 150, be resumed, and that the maximum be raised to Rs. 300 as in Government Service. I need not point out, that, being debarred from private practice Lady Doctors in the Child Welfare Scheme, are deprived of a most fruitful source of income which their sisters in Government service enjoy. I take this opportunity of recording with pleasure the hearty co-operation and assistance I received from all the Lady Doctors and from the other members of the staff.

Lady Superintendent.—

Dr. Mrs. L. N. V. Chinnappa continued to be in charge of the Scheme till 12th August 1926, when she proceeded on a year's leave. I took charge and continued to be in office for the rest of the year. Miss T. E. Stephens, Sub-Assistant Surgeon, was appointed in my place.

The National Health and Baby Week.—

This was held in the beginning of January 1927, in the South Indian Athletic Association Grounds under the joint auspices of the Madras Presidency Health and Welfare Association and the Madras Corporation. Judging by the thousands of persons who visited the Show and other exhibitions arranged inside the grounds, it was an unqualified success. The steadily increasing number of visitors to the Exhibition year by year affords convincing testimony to the growing recognition by the public of the importance and value of health as the foundation of human happiness, wealth and prosperity. The continuous stream of visitors entering the Child Welfare Section to see the several instructive charts and posters, etc., illustrative of the diseases and dangers threatening child life, once again proved its popularity as the best and most attractive show in the exhibition. Out of the many prizes that were awarded by the Committee for the best babies among the several classes, the scheme had the distinction of winning the majority and the challenge prize awarded by His Excellency for the best baby in the Show was won by baby Narayanaswami, entered by the Child Welfare Centre of George Town.

Besides this, the Child Welfare Scheme also won two gold medals, one for the most instructive stall in the Show and the other for the best model designed and manufactured locally. (Model of a Child Welfare Centre).

The trophies awarded for the best babies in this competition have stimulated a spirit of healthy emulation and a keen desire to secure these coveted distinctions among the mothers in the city whose interest and pride in preparing their children for the annual contest is a most happy and favourable augury for the improvement of the physique and health of India's future citizens.

We are very grateful to the Hon'ble Dr. U. Rama Rao, Dr. Mrs. Muthulakshimi Reddi, M.B., & C.M., M.L.C., L Col. A. J. H. Russell, I.M.S., at Lt. Col. E. W. C. Bradfield, I.M.S., who visited our centres and were pleased to make the following remarks:—

With kind courtesy of the Commissioner of the Madras Corporation, I had an opportunity of visiting all the eight centres of Child Welfare in the City of Madras, this morning with the Lady Superintendent, Dr. Kolandavelu. Dr. Kolandavelu was kind enough to give me all the detailed information I wanted. The arrangements made to look after pregnant women before, during and after confinement are excellent. Good sterilized milk is supplied to children under one year of age. Approximately 20 to 30 children are supplied with such milk in each centre and I wish the Corporation will make necessary arrangement to supply much more than this number, as I consider the cause of high infantile mortality is mainly due to under and bad feeding. The Corporation would do well to open a dairy farm and a milk depot on approved sanitary principles, with a view not only to be assured of a wholesome supply of milk but also to have the milk scientifically sterilised and pasteurized. In my opinion the Purasawalkam Centre, as it is at present, intended to meet the demands of 16, 17, 18, 19, 20 and 21 divisions is overworked. The bifurcation is therefore essential and another depot may therefore be opened at

CHILD WELFARE CENTRE.

Fortnightly weighing of the Infants.

Perambur. So also Triplicane Centre is too unwieldy and a depot in Egmore will relieve the congestion there. I see from the diaries maintained by the nurses and Lady Doctors that they are overworked and more centres must therefore be opened, if they are to be of any real utility to the public. I am much impressed with the good work done by the Lady Superintendent Dr. Kolandavelu and her zeal, enthusiasm and tact are commendable.

U. RAMA RAU,
Member, Council of State.
29-10-1926.

I had the pleasure of visiting with Dr. Kolandavelu, three of the Corporation Maternity and Child Welfare Centres, namely, Purasawalkam, George Town and Muthialpet, when I was made to feel that unless and until one comes face to face with the poor pregnant woman, nursing mothers and children that attend these Centres daily one cannot have any correct notion of the extent of their poverty and ill-health. As I also happened to be present at the time of weighing those babies that are given milk at those centres, I was very painfully struck, with their starved, ill-fed, ill-nourished, emaciated and unhealthy appearance. And further when Dr. Kolandavelu informed me that the very same children's milk supply was going to be gradually cut off owing to want of funds, I was very much moved indeed, as I could picture to myself the very serious effect such a step would have upon the already languishing health of those helpless infants. As we all know, these existing centres administer relief to thousands of deserving poor women and children in the city and hence similar centres have to be opened in other poor quarters of the city also. The present Superintendent impresses me as a willing and devoted worker who spares no pains to make the scheme more useful and popular and I am firmly of opinion that the scheme to be successful must be under sympathetic, able and efficient staff. In conclusion I like to point out that every civilized community considers it its first and foremost duty to look after the mothers and children so as to preserve the future race.

S. MUTHULAKSHMI REDDY,
M.B. & C.M., M.L.C.

I visited the Child Welfare Centre, Triplicane, to-day and found it carrying on as before, although under certain minor disabilities. These include the loss of telephones, and the cutting down of leave allowances to ridiculously low figure. The attendance is being maintained and that the work done is appreciated, is very evident. It seems a pity to spoil the ship for a haporth of tar!

Lt. Col. A. J. H. RUSSELL, I.M.S.

22nd July 1927.

I visited the Child Welfare Centre, Triplicane, to-day with Lt. Col. Russell and fully endorse all his remarks. I was very favourably impressed with the general appearance of cleanliness and efficiency of the Centre.

Lt. Col. E. W. C. BRADFIELD, I.M.S

Conclusion.—

In a retrospect of the results produced by the Scheme, during the year under review, facts which emerge prominently and challenge the serious thought and consideration of all true well-wishers of India, who desire a progressive improvement in the standard of physique and public health of the nation, are the present handicaps of the scheme which tend to limit the sphere of its activities and service, and the best methods to be adopted, in the light of past experience, to secure the steady expansion of its beneficient activities in the future.

The amount of work which a nurse may reasonably be expected to perform with care and efficiency has definite limitations, and it is a fact patent to any one studying the statistics of work done, that the phenomenal increase in the work undertaken by the scheme since its inauguration is clearly out of all proportion to the increase in the strength of the executive staff. It needs no elaborate argument to show that a staff which is manifestly inadequate to meet the ever-increasing demands on its service but is compelled by sheer pressure of circumstances, to undertake duties beyond its powers, cannot be expected to maintain a uniformly high standard of efficiency. The obvious solution to the problem is to revise the establishment with reference to the increase in the work since the inception of the scheme.

The reduction in the budget grant has necessitated the curtailment of free milk supply in the various centres and unless a supplementary grant is sanctioned during the current year it is painful to think that its supply shall have to be necessarily stopped—a measure fraught with disastrous results. In a country like India where people are yet slow to appreciate the value of child life as the greatest asset of the nation, the necessity and importance of a free milk supply as an indispensable adjunct of Child Welfare work cannot be too strongly emphasised.

The restoration of telephone communication to the various centres will considerably facilitate the speedy disposal of work by the staff as already pointed out.

Nine years have silently rolled by since the lusty infant was first born, and during the period of its existence, it had to wage a constant battle against the powerful forces of ignorance, prejudice, superstitution and poverty. But during this contest, against overwhelming odds, there were times when the infant's existence was imperilled and its life was despaired of. But like the fond mother watching over her child, and fearlessly defending it against attacks by the enemy, the Corporation has with unfailing solicitude and sleepless vigilance given its constant protection and support, until to-day full of the dauntless courage and strong vitality of boyhood it faces the future, rich with the promise of developing into vigourous manhood.

With the cheerful and enthusiastic co-operation of the public, and the loyal and liberal support of the Council, it is earnestly hoped that the coming year will not only witness the removal of several of the defects pointed out in the present organisation of the scheme, but also the attainment of greater success than achieved in the past in the performance of its noble mission of providing relief to the poor, suffering women and children of Madras.

Before concluding I take this opportunity of thanking on behalf of my staff and myself the Commissioner and the Council for the hearty support and encouragement they have uniformly extended to the scheme.

Miss D. KOLANDAVELU,
Ag. Superintendent, Child Welfare Scheme,
Corporation of Madras.
22-7-1927.

STATEMENT No. I.

Showing the cases of labour conducted by the Staff of the Child Welfare Scheme from January to December 1926 with comparative statements for years 1918 to 1925.

Period.	Centres.	How conducted.			Total Cases.	Caste.	
		By Nurses of the C. W. S.	Taken over after Barber women conducted labour.	Taken to Hospitals.		Mohamadan.	Non-Mohamadans.
From 1st January to 31st December 1926 ...	Triplicane ...	1,270	140	143	1,553	636	917
Do do ...	Washermenpet ...	647	69	124	840	117	723
Do do ...	Purasawakkam ...	1,343	181	206	1,730	164	1,566
Do do ...	George Town ...	701	89	116	906	36	870
Do do ...	Nungambakkam ...	463	192	68	723	95	628
Do do ...	Mirsahibpet ...	744	161	169	1,074	249	825
Do do ...	Muthialpet ...	465	48	63	576	89	487
Do do ...	Royapuram ...	670	125	56	851	98	753
	Total for 1926 ...	6,303	1,005	945	8,253	1,484	6,769
	1925 ...	6,118	1,243	933	8,294	6,807	1,487
	1924 ...	5,163	1,210	644	7,023	5,598	1,425
	1923 ...	4,357	1,097	366	5,820	4,638	1,074
	1922 ...	3,968	1,213	368	5,549	4,475	1,074
	1921 ...	3,060	796	256	4,112	3,281	831
	1920 ...	2,953	672	203	3,828	...	...
	1919 ...	978	108	87	1,173	612	561
	1918 ...	550	77	54	618	...	...

STATEMENT II.

Prematernity cases registered and diseases and ailments of pregnancy treated at the centres in 1926.

CENTRES.	Constipation	Dysentery.	V. D. H.	Albuminuria.	Syphilis.	Malaria.	T. P.	Worms.	Bronchitis.	Diarrhoea.	Rheumatism.	Anæmia.	Retention of urine.	Stomatitis.	Eczema Vulva	Ottorrhoea.	Influenza.	Jaundice.	A. P. H.	Pnuemonia.	Oedema.	Asthma.	Breast abscess.	Gastritis.	Conjunctivitis.	Ringworm.	Fever.	Flatulence.	Hysteria.	T. P.	Enteritis.	Swellings.	Scabies.	Stranguary.	Torpid liver.	Total.
Triplicane ...	296	24	1	47	...	...	...	16	36	5	1	123	...	4	...	...	4	...	...	...	...	...	1	...	...	1	...	1	...	...	...	...	...	...	...	560
Washermanpet ...	154	7	3	6	2	12	2	4	14	6	...	31	44	13	...	4	5	...	...	3	2	3	...	5	1	1	6	...	...	...	...	...	...	...	...	328
Purasawakkam ...	577	6	...	22	...	25	...	16	7	13	2	90	13	1	...	...	13	1	...	1	2	1	...	1	...	...	4	...	1	1	7	15	3	...	...	822
George Town ...	454	14	2	126	...	62	12	82	16	12	...	233	...	127	...	...	12	4	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	2	2	1,162
Nungambakam ...	238	17	...	24	...	7	...	12	95	5	...	104	...	5	...	...	1	...	...	...	...	...	...	...	...	...	13	...	...	...	...	...	...	...	...	521
Mirsaibpet ...	260	13	...	...	1	2	...	9	7	7	1	25	1	6	...	...	...	...	1	...	...	3	...	...	3	...	3	2	...	...	...	...	...	...	...	344
Muthialpet ...	262	...	...	...	1	17	...	...	1	6	...	94	...	3	...	...	3	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	389
Royapuram ...	238	14	...	23	...	21	...	...	13	...	...	13	...	...	1	2	1	...	1	...	...	...	2	...	2	...	...	...	...	...	...	...	...	...	...	331
	2479	95	6	248	4	146	14	139	189	54	4	713	58	159	1	6	39	5	2	4	4	7	3	8	6	2	26	5	1	1	7	15	3	2	2	4,457

Total No. of Prematernity cases registered.

Triplicane ...	937	Nungambakam ...	829	Total for 1926 ...	6,269
Washermanpet ...	328	Mirsaipet ...	1,023	„ 1925 ...	6,062
Purasawakkam ...	1,207	Muthialpet ...	389	„ 1924 ...	4,071
George Town ...	1,162	Royapuram ...	394	„ 1923 ...	3,501

STATEMENT III.

Maternal Morbidity (Puerperal) 1926.

Centres.	Adherent Membranes.	Retained Membranes.	Sepraemia.	Eclampsia.	A. P. H.	P. P. H.	Adherent Placenta.	Retained Placenta.	Albuminuria.	Stomatatis.	Sepsis.	Septicemia.	Piles.	Malaria.	Influenza.	Scabies.	Retention of urine.	Anæmia.	Dysentry.	Pneumonia.	Bronchitis.	T. P.	Ulcerated Vagina.	Small Pox.	Syphilis	Diarrhoea.	Jaundice.	Asthma.	Indigestion.	Breast abscess.	Constipation.	V. D. H.	Rheumatism.	Gastritis.	Pleurasy.	Worms.	Enlargement of Spleen.	Stranguary.	Chickenpox.	Fever.	G. C.	Typhoid.	Total.	Difficult cases taken to hospitals.
Triplicane ...	...	...	...	6	2	1	3	3	26	...	1	...	...	1	29	...	...	67	19	...	7	4	...	...	...	8	...	...	1	...	...	3	...	...	...	...	...	...	...	...	...	...	181	53
Washermanpet ...	...	...	...	1	...	2	2	...	...	...	...	...	...	22	...	...	...	21	6	1	3	2	...	...	...	3	...	1	2	1	5	1	...	...	...	...	...	...	...	...	...	...	73	53
Purasawalkam ...	...	...	7	6	2	2	2	1	87	1	4	2	2	31	3	4	7	105	28	5	16	23	5	1	10	5	...	2	...	1	40	...	...	...	...	8	...	...	1	62	5	3	481	20
George Town ...	3	1	...	-	2	2	...	7	15	36	...	2	4	11	6	6	4	210	7	...	5	13	10	...	...	19	5	3	...	...	...	2	...	...	...	...	5	5	...	...	...	...	525	47
Nungambakkam ...	...	...	4	1	...	2	...	...	10	...	...	...	...	8	2	...	0	26	3	...	10	...	...	...	[illegible]	5	...	...	...	...	...	...	2	2	1	2	...	...	...	...	...	...	80	68
Mirsaibpet ...	...	...	...	3	1	1	2	5	2	2	4	...	2	14	2	3	0	17	7	...	13	2	...	1	6	...	...	2	...	1	...	2	5	...	...	2	...	...	...	...	...	...	99	51
Muthialpet ...	...	...	...	2	...	1	4	...	5	3	...	...	1	15	...	...	...	58	3	...	2	1	...	...	5	2	...	...	...	1	7	1	...	...	...	...	...	...	...	...	...	...	111	22
Royapuram ...	...	...	...	2	1	2	5	...	...	...	...	...	...	6	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18	15
Total ...	3	1	11	23	8	13	18	16	285	42	9	4	9	108	42	13	11	505	74	6	56	45	15	2	23	42	5	8	3	4	52	9	7	2	1	12	5	5	1	62	5	3	1568	329

STATEMENT IV.

Maternal Mortality (Puerperal).

Centres.	Eclampsia.	Adherent placenta.	V D. H.	Dysentery.	General Anasarca.	Causes unknown.	Total.
Triplicane ...	...	...	...	...	...	...	Nil.
Washermenpet ...	...	1	2	...	...	2	5
Purasawakkam ..	...	1	...	1	...	...	2
George Town ...	...	...	...	...	1	...	1
Nungambakkam ...	...	...	1	...	...	...	1
Mirsahibpet ...	...	...	1	...	...	...	1
Muthialpet ...	...	...	...	..	...	...	Nil.
Royapuram ..	1	...	1	1	...	...	3
	1	2	5	2	1	2	13

Deaths among cases brought to the notice of the Child Welfare Scheme but not under our treatment.

Serial No.		Triplicane.	Washermanpet.	Purasawakam.	George Town	Nungambakam.	Mirsaibpet.	Muthialpet.	Royapuram.	Total.
1	Under private Doctors.	6	1	1	2	...	...	3	...	13
2	In Hospitals cases taken by C. W. S. ...	2	2	3	6	4	1	8	3	29
3	Under Vythian's treatment ...	1	...	1	...	...	1	1	1	5
	Total ...	9	3	5	8	4	2	12	4	47

A total of 60 deaths occurred among 8253 cases.

Maternal Mortality rate for all deaths among cases brought to the notice of he scheme is 0·72 per cent. Several of these deaths were due to general diseases.

STATEMENT V.

Table showing the total attendance of children and mothers at the Child Welfare Centres during 1926.

From 1st January to 31st December 1926.	Age.				Total new attendance.	Nature of disease.									Total attendance for the year.	Pregnant women treated at the Centre.	Average daily attendance.
	Under 1 year.	1 to 5 years.	5 to 12 years.	Women.		Respiratory.	Alimentary.	Skin affection	Influenza.	Ear and eye disease.	Malaria.	Syphilis.	Anæmia.	Other causes.			
Triplicane	2305	1337	980	3017	7639	1287	2120	551	453	492	96	8	910	1722	19219	579	53
Washermanpet	1272	479	285	1752	3788	1534	1064	199	20	115	210	4	82	560	7787	187	22
Purasawalkam	1941	1530	967	2763	7201	766	925	776	483	60	545	30	569	3047	19431	866	53·3
George Town	2296	1565	775	3789	8425	745	2272	316	...	205	656	...	515	3686	21864	1129	60
Nungambakam ...	1240	1983	1581	2219	7023	1085	2878	798	37	456	199	12	186	1010	14493	362	39.7
Muthialpet	454	320	219	1485	2478	135	553	130	82	82	310	17	250	919	8571	325	23.45
Mirsaibpet	1249	639	925	2187	5000	628	1571	529	134	364	172	24	139	1439	11079	409	30.3
Royapuram	821	1490	1971	3020	7302	567	1988	500	49	167	1009	...	159	2863	12370	325	34
Total for ... 1926 ...	11578	9343	7703	20232	48856	6747	13371	3829	1258	1941	3197	95	2810	15246	114814	4192	316
Do. ... 1925 ...	14704	8871	5713	20708	49996	6469	21504	3783	967	2856	3900	64	2647	12806	105363	4054	299·3
Do. ... 1924 ...	10731	7444	4256	14006	36137	6040	12721	2231	840	1741	2074	13	1983	8789	71244	3134	194·7
Do. ... 1923 ...	6549	3678	2349	7463	19126	3359	5833	2090	243	617	995	30	...	6060	33535	3773	93
Do. ... 1922 ...	4995	3387	1457	4533	14372	2357	4846	1997	189	429	285	24	...	4245	28138	1718	78
Do. ... 1921 ...	5474	2533	1203	5564	14774	2719	3133	1087	494	433	...	24	...	6875	25919	1490	35
Do. ... 1920 ...	4079	1762	1855	3934	10636	1912	1160	874	583	308	...	29	...	5715	18816	1040	73
Do. ... 1919 ...	1617	858	316	1074	3365	295	139	250	31	37	...	12	...	253	8442	322	24·1
Do. ... 1918 ...	222	207	52	235	716	77	27	55	4	1	...	4	...	35	1558	116	18

STATEMENT No. VI.

Ages at death of infants born during 1925 and kept under observation during the first year of life.

From 1st January to 31st December 1925.	Total No. of cases visited.	Still born.	Died within				Total death excluding still born.	Left the city and otherwise not traceable.	Number of living children traceable when one year old.
			10 days.	1 to 3 months.	3 to 6 months.	6 to 12 months.			
Triplicane ...	1,628	46	63	62	45	109	279	312	991
Washermenpet ...	1,034	40	44	27	20	50	141	235	618
Purasawalkam ...	1,622	60	82	46	54	71	253	355	954
George Town ...	847	36	40	57	44	53	194	41	576
Nungambakam ...	655	25	23	19	19	28	89	45	496
Mirsahibpet ...	1,060	27	41	35	30	54	160	91	782
Muthialpet ...	604	23	42	44	34	48	168	47	366
Royapuram ...	857	32	28	46	40	57	171	22	632
Total ...	8,307	289	363	336	286	470	1,455	1,148	5,415

Infantile Mortality Rates.

Year.	City.	For infants in care of C. W. S.
1918	355·2	276·8
1919	329	231·9
1920	279	173·7
1921	281·9	222·7
1922	308·0	201·9
1923	254·0	203·7
1924	264·1	169·5
1925	278·8	181·4
1926	279·3	

STATEMENT VII.

Causes of death among infants born in 1925 and kept under observation during the first year of life.

CENTRES.	Total number of cases visited.	Still born.	Pneumonia.	Influenza.	Abscess.	Enteritis.	Small pox.	Bronchitis.	Malnutrition.	Malaria.	Convulsion.	Whooping Cough.	Skin disease.	Syphilis.	Chicken pox.	Died within 10 days.	Drugged with native medicine. *	Diarrhoea.	Dysentery.	Constipation.	Enteric fever.	Causes unknown.	Total deaths.	Left the City and not traceable.	No. of living children who survived during the 1st year of life.
Triplicane	1628	46	...	45	1	53	7	31	1	1	40	14	4	4	...	8	10	...	...	...	...	60	279	312	991
Washermanpet	1034	40	13	2	...	23	2	12	7	...	5	...	6	...	...	44	10	...	...	...	1	16	141	235	618
Purasawalkam	1622	60	11	12	1	8	4	25	...	11	9	6	6	...	...	81	8	34	2	4	5	26	253	326	95
George Town	847	36	15	...	3	22	4	35	12	2	30	10	...	4	1	...	...	...	...	...	6	50	194	41	576
Nungambakam	655	25	1	2	2	28	9	23	4	0	...	...	...	...	...	...	...	...	...	...	...	20	89	45	496
Mirsaibpet	1060	27	1	...	1	25	9	21	11	17	10	4	...	10	...	31	10	...	...	...	...	10	160	91	782
Muthialpet	604	23	6	3	1	33	3	31	41	...	5	...	...	...	...	...	...	...	...	...	...	45	168	47	366
Royapuram	857	32	1	...	4	78	3	25	6	...	6	...	15	...	...	28	...	...	...	...	...	5	171	22	632
Total ...	8307	289	48	64	13	270	41	203	82	31	105	34	31	18	1	192	38	34	2	4	12	232	1455	1119	5415

* This bears reference to the administration of indefinite and non-the-rapeutic medicines to new born infants by ignorant grandmothers during and after puerperium,

STATEMENT VIII.

Number of visits paid by the Staff, C. W. S. during the year 1926.

Centres.	Midwives.	Health visitors.	Lady Doctors.
Triplicane ...	16,412	23,087	1,052
Washermanpet ...	10,488	7,015	1,014
Purusawalkam ...	18,887	14,997	1,332
George Town ...	13,640	9,638	1,751
Nungambakkam ...	6,417	11,120	665
Mirsahibpet ...	9,162	12,706	1,242
Muthialpet ...	7,223	4,503	639
Royapuram ...	8,584	7,606	1,042
Total ...	90,813	90,672	8,737

STATEMENT IX.

Showing the No. of cases taken on for milk supply during the year 1926.

Centres.	No. taken on milk supply	Yearly attendance.	Average daily attendance.
Triplicane ...	112	24,552	67
Washermanpet ...	96	22,026	60
Purusawalkam ...	116	26,537	72·7
George Town ...	106	24,934	68
Nungambakam ...	36	3,758	24
Mirsahibpet ...	48	3,703	24
Royapuram ...	43	5,948	39·3
Total ...	557	111,458	355

STATEMENT X.

Statement showing the Births and Infantile Mortality during 1926 and comparative statements for years 1921 to 1925.

Divisions.	No. of births registered excluding still births.	Still births.	Infantile mortality.	Infantile Mortality rate for					
	1926			1926	1925	1924	1923	1922	1921
1	778	39	257	330·3	293·3	294·8	349·9	286·2	308·2
2	1,005	58	273	271·6	277·7	297·6	207·9	283·6	285·5
3	954	66	337	353·2	288·4	285·8	273·2	333·1	286·1
4	804	53	260	323·3	256·6	236·2	238·3	304·0	331·2
5	229	14	87	379·[illegible]	370·7	381·4	405·0	342·3	456·9
6	298	16	88	295·3	361·6	300·0	287·0	385·7	348·8
7	369	19	109	295·3	318·5	300·4	305·4	328·4	390·1
8	145	9	52	358·6	438·0	437·0	369·6	342·5	476·2
9	635	25	179	281·8	303·7	312·2	289·7	301·7	337·2
10	603	37	201	333·3	381·8	282·9	271·0	373·6	336·0
11	161	12	49	304·3	359·8	401·3	329·7	433·7	522·6
12	677	26	219	323·4	303·5	318·5	325·8	309·1	319·6
13	572	27	177	309·4	301·8	355·9	295·0	428·1	376·2
14	85	6	33	388·2	284·1	452·8	295·7	500·0	339·8
15	491	26	185	376·7	377·9	318·4	309·0	360·9	296·9
16	1,442	74	392	271·8	195·8	232·5	203·2	261·7	220·3
17	1,088	57	310	284·9	344·9	253·8	241·0	329·9	289·9
18	885	32	220	248·5	251·0	262·5	205·0	306·7	205·8
19	863	39	231	267·6	258·6	269·5	236·2	332·1	269·5
20	1,197	90	286	238·9	231·8	197·3	232·0	258·6	229·3
21	751	22	177	235·6	274·6	236·5	250·0	310·7	239·6
22	822	38	174	211·6	250·3	216·8	215·4	281·7	256·4
23	1,020	52	313	306·8	258·2	245·9	249·6	323·6	267·0
24	1,299	53	327	251·7	236·1	236·4	214·5	255·4	249·0
25	661	44	135	204·2	162·5	206·6	221·9	218·4	206·6
26	696	26	178	255·7	247·9	261·6	216·5	275·5	230·8
27	756	26	218	288·3	272·3	299·7	249·7	302·4	266·8
28	1,042	46	265	254·3	282·6	238·5	260·5	212·6	299·3
29	957	40	231	241·3	267·1	239·0	237·2	296·0	251·3
30	715	33	182	254·5	313·0	261·5	252·2	218·9	254·4
	22,000	1,105	6,145	279·3	278·8	264·1	254·0	308·0	281·9
	General Death rate.			45·0	47·3	41·7	37·8	42·7	38·5

STATEMENT XI.

Table showing details of all Births in the Municipal Divisions in which the Scheme was working for one year ending with 31st December 1926.

Child Welfare Centres.	Municipal Division.	Total No. of births from 1–1–1926 to 31–12–1926.	No. attended by Corporation midwives.	Percentage to total births.								
				1926	1925	1924	1923	1922	1921	1920	1919	1918
Royapuram Centre...	1	817	321	39·3	29·1	13·0	7·1	...	...	...		
	2	1063	352	33·1	31·6	10·9	19·2	12·4	15·7	8·9		
Washemanpet Centre.	3	1020	403	39·6	39·4	38·3	26·5	29·7	35·8	20·9		
	4	857	244	28·5	31·7	38·4	24·2	21·2	22·1	20·5		
Muthialpet Centre ...	5	243	38	15·6	12·5	6·7	5·5	1·9				
	6	314	50	15·9	16·4	1·6	12·6	7·4				
	7	388	220	56·7	41·3	27·6	18·0	6·4				
	9	660	157	23·8	23·5	18·8	15·0	7·9				
Georgetown Centre ..	8	154	18	11·0	3·1	13·4	19·6	1·3				
	10	640	204	31·8	31·5	28·3	24·0	11·4				
	11	173	2	1·1	3·9	2·5	7·6	5·0				
	12	703	210	29·8	31·1	24·4	27·4	15·8				
	13	599	168	28·0	23·7	19·3	20·0	16·0				
	14	91	61	67·0	21·3	6·2	2·8	...				
	15	517	38	7·4	8·3	6·4	9·3	6·5				
Purasawalkam Centre ...	16	1516	344	22·7	21·5	20·8	25·3	22·4	18·6	15·9		
	17	1145	356	31·1	30·7	22·1	26·4	27·9	26·7	18·4		
	18	917	329	35·8	26·7	28·7	28·8	25·1	24·7	25·2		
	19	902	117	12·9	12·95	12·0	12·9	12·6	8·6	10·3		
	20	1287	68	5·2	5·6	3·7	4·4	4·1	1·8	3·5		
	21	773	129	16·6	14·0	25·6	14·6	13·3	9·3	13·3		
Nungambakam Centre.	22	860	245	28·5	28·1	14·5	3·8	...	...	...		
	29	997	218	21·8	20·35	14·9	3·0	9·9	9·4	11·0		
Triplicane Centre ...	23	1072	187	17·4	16·5	42·0	11·3	10·1	8·2	6·6		
	24	1352	556	41·1	38·9	29·7	38·2	40·4	41·5	42·0		
	25	705	229	32·5	25·8	11·8	36·5	33·1	30·7	28·5		
	27	782	298	38·1	35·3	45·9	35·6	31·2	28·1	27·9		
Mirsaibpet Centre ...	26	722	187	25·9	19·3	25·1	16·8	19·0	20·7	16·3		
	28	1088	392	36·0	34·2	4·9	19·4	19·1	16·2	14·9		
	30	748	165	22·0	14·2	21·0	4·7	2·2	...	...		
Total ...		23105	6306	27·3	25·1	21·0	19·0	19·5	21·7	21·3	10·4	11·9

Note.—1. The cases conducted in hospitals are as follows:—

1.	Government Maternity Hospital		2798
2.	Victoria Gosha	do	1447
3.	Raja Sir Ramaswami's	do	1600
4.	Kalyani Hospital		549
5.	Christiana Rainy Hospital		505
		Total ...	6899

Note.—2. Parcentage of hospital births to total births.

1926	1925	1924	1923	1918
29·8	30·0	28·5	28·8	16·9

Note—3. Percentage of cases in care of C. W. S. to total births.

1926	1925	1924	1923	1919
27·3	25·1	28·6	25·3	11·9

MEDICAL INSPECTION OF CORPORATION SCHOOLS.

The scope and objects of Medical Inspection.—The Child of to-day is the citizen of tomorrow, and would be an useful asset or a drag on the nation according to its health, and as such any scheme for national well-being and prosperity must of a necessity commence at its integral part, the infant. In countries where state, public and voluntary organisations for the care and welfare of citizens are fully elaborated, the infant at first passes through the care and attention of "Infant welfare organizations" and after reaching the age of 5, is put to school and brought consequently under the influence and guidance of teachers. At school, the child is to learn not only the three Rs. but also the elements of healthy way and healthy living, the inculcation of which would certainly leave an indelible impression on its tender and yet receptive mind. Thus in all advanced countries the School Medical Service and its allied activities now form, a highly organised system, designed for the physical welfare of the school child, and comprising medical inspection of children, Medical treatment, sanitation of the Schools, Education in hygiene, provision of meals and clothing to the deserving, and what is more important physical training. Its fundamental function however is the routine and systematic inspection of every child, sick or well every year.

Staff.—The staff consists of two Medical Inspectors and one Medical Inspectress to be solely in charge of girls. The present staff has been found to be quite inadequate to cope with the work, since the bringing into effect of the compulsory Education Act. The number of Corporation Schools and the average strength in each of them is always on the rise, almost having trebled in volume, while the Medical staff continued to be the same. On the recommendation made to the Council, the Council at its sitting on 31-3-1927 sanctioned the appointment of two more Medical Inspectors and one additional Medical Inspectress.

In this second year of Medical Inspection, the Medical Inspectors continued their work, and inspected schools that were not inspected during the preceding year and also seven of the new Mahamedan and Hindu Schools, newly brought under the control of the Corporation as a result of the introduction of Compulsory

Education Act. Hence Schools taken up for inspection last year were not inspected this year.

Findings of Medical Inspection.—In all 4,304 boys and 2,472 girls were examined during the year. The Medical Inspectors inspected 25 schools, and the Inspectress inspected 45 schools. 61·31 per cent. of boys and 77·7 per cent of girls were found defective in one or more aspects, as against 75:8 per cent. of boys and 74·38 per cent. of girls of last year. A summary of the analysis will be seen in the statement at the end of the report.

Cleanliness, condition of the head, skin etc.—1,162 boys or 26.99 per cent. and 996 or 40.2 per cent. of girls were found to be dirty in their person and clothing, about 40 per cent. of them being verminous. Uncleanliness constitutes a sign of parental irresponsibility. The school staff sermonise as much and as often as possible to the parent on the adage—a clean mind in a clean body. School bath was introduced on an experimental basis in six of the schools, but just as it was bearing a fair headway, and a noticeable improvement in the appearance and clothing of the boys, was discernable, the school staff slackened in their interest and also requisite materials for the school bath such as towels, toilet, soaps, bucket, tumblers etc., were not regularly supplied. For a satisfactory working of the scheme, a more liberal and regular supply of bathing requisites and a more active interest on the part of the school staff is essential.

Clothing.—Apart from being dirty in the majority of cases, the clothing is scanty, torn and in need of repair. School Doctors realise that many of the parents by themselves, cannot afford a better clothing and as far as possible the cost of washing and replenishing should be met with at public expense.

The hair, face, teeth and hands should always be kept clean and nails cut short, and the teachers themselves should set an example by systematic instruction and daily practice of the teachings of hygiene and the laws of health.

Malnutrition.—729 or 16·93 per cent. of boys and 379 or 15·33 per cent of girls as against 21·90 per cent. and 11·32 per cent respectively in 1925, were found to be under nourished. The main strength of the Corporation Schools is drawn from the lower and depressed classes who are remarkable for their progentiveness and consequently have many illfed children. In extreme degree of malnutrition, the children are nothing but skin and bone, pale, dull with sunken eyes, brittle scanty hair and dry scaly skin. These children seem generally to have a single meal altogether devoid of fat and for the remainder of the day console themselves with eating rotten boiled gram. They are listless and pine away in some corner of the class room, taking little or no interest in what is going on in the School. On the interest of good intellectual development, the physical development of these must be improved. Valuable means of controlling malnutrition are by the routine administration of milk and cod liver oil and one substantial healthy meal during midday.

Teeth and Mouth.—1,294 or 30·58 per cent of boys and 1,193 or 48·2 per cent of girls were found to be suffering from diseases of teeth and mouth, the corresponding figures for 1925 being 32·04 per cent and 48·7 per cent respectively.

Dental Caries	366
Dirty Teeth	581
Stomatitis	349
Pigmented Tongue	5
Oral sepsis	2
Cleft Palate	2
Pyorrhœa Alveolaris	7
Bleeding Gums	2
Herpes	1

Dental caries and oral sepsis are much more common in younger than in older children, and is mainly due to the neglect on the part of the parent in habituating the little boy in dental cleanliness. Every opportunity has been taken for educating the parents and teachers in the urgent need for clean teeth and mouth for maintaining sound health. There is an erroneous idea current among parents that septic or decaying teeth do not matter as they will soon fall off. They little know that these are responsible for enlarged glands neck, septic tonsils, gastric and other disorders detrimental to health.

Nose and Throat.—1884 or 43·74 per cent of boys and 423 or or 17·1 per cent. of girls as against 41·61 per cent., 19·81 per cent.

respectively in 1925, were found to be suffering from diseases of the nose and throat, singly or in combination.

Rhinitis	37
Nasal Polypus	1
Enlarged Tonsils	1309
Enlarged and Palpable cervical glands	1231
Granular Pharynx	20
Adenoid Growths	6
Inflammed Tonsils	2
Bifid uvela	4

Dental caries. catarrhal conditions, oral sepsis, discharge from ears, and insanitary conditions of the home are the chief causes which provoke diseased conditions in the nose and throat. Seasonal changes of weather and incidence of measles and like eruptive fevers, further aggravate throat conditions.

Cases with slight enlargement of tonsils were referred to the Corporation Dispensaries for treatment, while those with abnormal or chronic enlargements or again those having other complications were referred to the General Hospital for removal of tonsils by operation. It is reported that in majority of cases, parents are very loathe to follow up the latter advice.

Eye Disease:—192 or 4.46 per cent of boys and 221 or 8·94 per cent. of girls were suffering from different eye diseases or their sequelae. The corresponding figures for 1925 were 6·85 per cent. of boys and 3·01 per cent. of girls.

Xerosis	53
Conjunctivitis	50
Granular Lids	35
Squint	28
Corneal opacity	17
Sty	6
Ptosis	4
Corneal opacity extensive leading to blindness	3
Night Blindness	2
Blepharities	1
Trachoma	1
Iritis	1
Lachrymation in both eyes	1
Sub-conjuctival Hæmorrhage	1

Minor complaints such as conjuctivitis blepharitis, xerosis etc., have been dealt with at the Corporation Dispensaries, while others have been advised to attend the Government Opthalmic Hospital, for special treatment. It is regrettable to note that the School Doctors found during their re-inspections that most of the boys so advised did not seek the treatment either due to poverty or inability to find the hire for a conveyance to cover the distance while in many cases, conservatism and mostly superstitious ignorance swayed the parent from the path chalked out. Different degrees of blindness caused by corneal opacity are in many cases amenable to treatment, and in 90 per cent. of them due to an attack of Small-pox. This serious calamity may be prevented or at least reduced in a large measure by enforcing systematic revaccination of all school children once in seven years and also during the outbreak of epidemics.

Vision.—71 or 1·65 per cent. of boys and 11 or 0·44 per cent. of girls as against 1·55 per cent. of boys and 0·34 per cent. of girls in 1925 had defective vision and were advised to seek treatment at the eye infirmary.

The necessity of appointing an Opthalmic Surgeon whose duties shall be to see and treat such of the school children as are referred to, to him at the school as far as possible and other serious cases at his opthalmic centre, is becoming more and more urgent as we find children with short sight or other serious eye defect, fail to obtain remedy or treatment either due to poverty or other inconvenience to go to the hospital from the different corners of the city. The Corporation will have to provide glasses to deserving cases.

Ear disease.—39 boys (0·91 per cent.) and 174 girls (7·03) per cent. had diseases of the ear while the figures in the year 1925 were 2.21 and 1.12 per cent respectively.

Otorrhoea	26
Otitis	7
Eezema Ear lobe	6
Flat Pinna	1

A few cases of chronic ear discharge were referred to the General Hospital for special treatment, while others are being treated at the Municipal dispensaries.

Hearing.—8 boys (0·18 per cent.) and 4 girls (0·16 per cent.) were defective in hearing as against 0:35 of boy and 0.04 per cent. of girls in 1925.

There were no cases of complete deafness and in most cases the defect was one of degree either due to inflamatory disease of the nose and throat or general backwardness or dull mentality.

Speech.—31 boys (0·72 per cent.) and 9 girls (0·36 per cent.) were defective in speech.

Stammering	18
Thick Slow Nasal	7
Lisping	5

The School Doctors have been advising the pupils with stammering to bawl out any song or lesson at the seaside or in any open ground with pebbles in their mouths.

Circulatory System.—111 boys (2.58 per cent.) and 277 girls (11·2 per cent.) were defective. The corresponding figures for 1925 being 4.72 percent and 7·66 per cent.

Anaemia	38
Functional irregularities of the heart	69
Organic Diseases of the Heart	10

Suitable cases were advised treatment at Corporation Dispensaries, and serious ones referred to General Hospital.

Tuberculosis.—39 or 0·91 per cent. of boys and 14 or 0.56 per cent. of girls were found to be suffering from Tuberculosis in one or other form; the corresponding figures for 1925 were 1·55 per cent. and 0·38 per cent respectively.

Pulmonary Tuberculosis	35
(*a*) Incipient	28
(*b*) Confirmed	7
Tuberculous glands neck (Scrofula)	3
Tuberculosis Bone (Vertebrae)	1

The latency of the disease in its earlier stages when treatment is more effective emphasises the necessity for a careful search of all such cases. The one objective must be early detection and the school doctors are alive to this. They have been advising the school staff to keep a careful watch over susceptible children and insist on parents to resort to treatment. Gratuitous supply of milk and cod liver oil and an intelligent co-operation on the part of the parents would considerably fortify us in this compaign, against this fell disease.

Respiratory Diseases.—220 boys (6.11 per cent.) and 164 (6·63 per cent.) girls had respiratory diseases. The figures for 1925 were 11:30 per cent. and 6:07 per cent.

Bronchitis	193
Bronchial Asthma	22

The incidence of Bronchitis is very high upon the younger children than on the older. All of them have been prescribed for and sent to the dispensaries for treatment.

Abdominal Organs.—95 boys (2.21 per cent.) and 27 girls (1·09 per cent.) had diseases of the stomach, intestines and other associated organs, as against 6.20 per cent among boys and 0·095 per cent. among girls in 1925.

Enlarged spleen	33
Inguinal Hernia	18
Umbilical Hernia	13
Hydrocele	17
Enlarged Liver	3
Intestinal Colic	2
Dyspepsia	2
Gastritis	2
Orchitis	2
Ventral Hernia	1
Diarrhoea	1
Dysentery	1

Incidence of enlarged spleen, mostly malarial was marked in schools in George Town. Cases with Hernia, Hydrocele and combined enlargement of Spleen and Liver were referred to Government Royapuram or General Hospital, while others were advised to attend nearest Corporation Dispensary.

Bones and Joints.—94 boys (2·18 per cent.) and 55 girls (2·22 per cent.) has diseases of bones and joints or their sequelae. The corresponding figures for 1925 were 4·31 and 17·6 respectively.

Pigeon or Rickety Chest	82
Sprains	3
Spinal curvature	3
Dislocation	2
Caries	2
Polyarthritis	1
Ankylosis	1

Nervous and Psychic System.--19 boys (0:44 per cent.) and 14 girls (0:56 per cent.) were defective under this heading as against 1.07 per cent and 0.34 per cent respectively in 1925.

General backwardness or Dull mentality	9
Paralysis–sequalae of infantile palsy	4
Paraesthesia	3
Incontinence of urine	3
Epilepsy	1

Appropriate advice and treatment were given to these cases.

Infectious and contagious diseases.—334 boys (7·76 per cent.) and 161 girls (6·51 per cent.) had infectious diseases including skin affections. The coresponding figures for 1925 were 8·82 per cent. and 2.5 per cent respectively.

Malaria	19
Leprosy	5
Whooping cough	4
Kala–Azar	1
Chicken pox	1

The remaining were cases of Scabies, Psoriasis, Ring-worm, Lichen, Herpes, Urticaria, Eczema etc.

Boys suffering from Malaria and skin diseases were advised treatment at the Corporation Dispensaries, while the boys suspected of Kala Azar were advised to seek treatment at the General Hospital. The boy with Chicken pox was temporarily excluded from attending the school and the boys suffering from Leprosy were removed from the schools, by persuading their parents to seek treatment at Chingleput.

Other diseases and defects.—217 or 5.04 per cent. of boys and 747 or 30.20 per cent. of girls were found defective as against 6·79 per cent of boys and 8·7 per cent of girls in 1925.

Worms	58
Wounds and ulcers	43
Phimosis	38
Boils	18
Undescended Testis	35
Enlarged Groin Glands	4
Adherent Prepuce	4
Alopoecia	3
Pappilloma	2
Leucoderma	1
Sinus cheek	1
Tumour neck	1
Retention Cyst	1
Internal Piles	1
Keloid growth	2
Dysuria	1
Appendicitis	1

Minor maladies were treated at the Corporation Dispensaries, while some of the more serious cases were referred to General Hospital.

Number not bearing marks of Vaccination.—43 or 0.99 per cent. of boys and 40 or 1·21 per cent. of girls had no visible marks of vaccination. All such cases have been advised revaccination.

Deformities.—25 boys (0.58 per cent) and 13 girls (0.53 per cent.) had deformities.

Shortened limbs	6
Spinal curvature	5
Ch. Dislocation Hip	4
Supernumerary Fingers	2
Talipes equinus	2
Anikylosis	2
Harelip	4
Genital Deformity	1

Re-inspections.—105 re-inspections were made in various schools and the condition of the pupils noted. The school staff should evince some more lively interest in medical inspection work and must carry out instructions given to them. Such intelligent co-operating teaching staff must be well encouraged by the authorities concerned. Any time and energy spent by schools staff is always well spent and the lasting benefit that would accrue in the years to come, will redound as much to their credit as to the Medical Inspectors.

Medical Treatment.—School Medical service aims at practising preventive medicine. It is preventive, explanatory and educational, and intends to forewarn the application of suitable remedies in proper time.

The number of children prescribed for and sent to Corporation Dispensaries was 3789.

Cases referred to General Hospital	142
Cases referred to Opthalmic Hospital	135
Cases referred to Tuberculosis Institute ..	33
Total cases referred to special Hospitals ..	310

Broadly speaking the usual categories of defects requiring treatment were:—

(a) Minor Maladies.
(b) Defective Teeth.
(c) Enlarged Tonsils.
(d) Defective Vision.
(e) Crippling defects.

and unless and until suitable arrangements are made for providing appropriate treatment for each of the above, little or no progress can be made and none expected in the direction of bettering the health condition of the children. So long again as this objective remains unfulfilled so long will the education imparted be defective both in the receptive and retentive powers of the pupils. The Corporation Dispensaries serve the purpose well enough in the treatment of minor ailments such as an abscess, or an ulcer, a wound, or a sprain, a mild attack of colic or fever. But where vital defects are concerned such as those of eye, ear, throat, etc., recourse must be had to special or bigger institutions. The Medical services of the Corporation cannot go beyond rendering advice to the parent, who in majority of cases lets it go; the poor child is none the better for it, (nor is there any obligation on the part of the public institutions in the City, for receiving and treating children recommended by the Corporation Medical Service). The former have their own restriction in regard to space, accommodation, equipment etc. It seems therefore that it is very necessary for the Corporation to equip one or two school clinic where the services of specially qualifed medical practitioners should be made available either as part time Officials or on payment by the number treated. In either case the child must have appropriate relief and when the parent is too poor to bear the cost of treatment, operation or otherwise provision of glasses etc., the Corporation must pay from its own funds.

School sanitation.—The general sanitation of school surroundings was far from satisfactory, and the authorities concerned are taking action to rectify them as far as possible.

School Latrines.—Latrine in the new model schools are devoid of partial roofing and taps within. While some of them are equipped with flush out system, others are not. All the latrines should have the flush system of conservancy. The latrines in most of the schools must be enlarged and separate compartments for boys, girls and staff must be made.

Water Supply.—Pupils drink unfiltered water direct from the tap. On the recommendations of the Medical Inspectors, strained and stored water is distributed for children to drink in some of the schools. This may be done in all the schools till supply of filters is considered favourably.

School Equipment.—The furniture in some of the schools is highly inadequate and it is hoped that the educational authorities will pay a little more attention to this matter.

Manual Training.—Tailoring in Mahomedan quarters of the city and carpentry and gardening in all the schools are taught.

Bathing Classes.—Bathing classes were introduced on an experimental basis in six of the schools mentioned below.—

1. Kasimode
2. Cemetery Road.
3. Chochrane Basin Road.
4. Mirsahibpet.
5. Thousand Lights
6. Chetpet.

Inspite of repeated recommendations for the supply of soaps, towels, and other requisites even the original supply of hard soap which was unfit for toilet, dwindled into nothing. The School staff slackened in their supervision of these classes and thus the school bath just at a time when children were learning to enjoy this course and visible improvement in personal cleanliness was noticeable, is reducing itself into a farce. The school must have a fountain bath, the school curriculum must boast of bathing classes, the school staff must set apart a period and treat school bath as a practical lesson in Hygiene, and the educational authorities must provide bathing requisites such as fairly decent yet cheap toilet soaps, washing soaps, towels, buckets, tumblers, etc. Given these, school bath will assuredly be a success.

Excursions.—The same instructions regarding excursions to the seaside, sight seeing, and places of interest in and around the City have been given. The good effect of such periodical excursions cannot be too well emphasised.

Midday Meals.—Midday meal is not offered as charity, but as a valuable means to control malnutrition, and as such should be properly cooked with proper proportions of fat and proteins. Children so crippled as to be unfit to live, or unlikely to survive, are when gathered in swiss preventorices, cast off their sickly garb and metamorphose into healthy cherubs, that their mothers fail to detect their children. The key to such a metamorphosis lies in the routine administration of cod liver oil and milk, open air life, and health education, which gives a habitual right outlook, a healthy conscience, and a healthful practice.

The reinstitution of midday meal is looked forward with interest.

Co-operation of parents and teachers.—Good eye sight and hearing, a reasonable degree of physical strength, muscular development and sound digestion and assimilation of food are true indices of personal health. Impairments of eyes, teeth and physique represent in main the school maladies, and School Medical Service concentrates its attention on these, to remedy or ameliorate the evils thereof. The school doctors can examine, prescribe and advise the pupils; cajole and urge the pupils and parents to seek treatment and relief, but actual benefit to the pupil rests upon the co-operation of the parent. Poverty, ignorance, or superstition sways the parent from the path chalked out, and it is to combat this, that the teacher is called in to use his influence and persuasive powers over the parent and get them seek the remedy recommended. The teacher plays an important part in the Medical Inspection and the success or failure of the Medical Inspection in a large measure depends upon him. It will be of interest to recall the words of Dr. Kaye on the relation between the teacher and school Medical Service. "The Head Teacher's interest is the cardinal necessity of successful work. If the Head Teacher identifies himself with the aim of school medical inspection, its success is assured. On the other hand, if his interest is lukewarm or non-existent, school inspection is not half as successful as it might be. In the former case, the cards are well prepared the parent invited, the special cases selected with care, the inspection is *felt* to be successful, the actual work is more enjoyable to help and the teacher being interested in the results is able to help the parents considerably."

Attendance of Parents and House Visits.—As many as 1,719 parents were present during the routine inspection and necessary advice was given to them. Further 1,267 house visits were made, for advice and treatment.

REPORT ON THE WORKING OF THE CORPORATION WATER ANALYSIS LABORATORY FOR 1926.

General.—The year under report has been an exceptionally busy one for the Water Analysis Laboratory, as it was called upon to deal with a very large number of water samples. Table I gives a comparative statement of the number of samples dealt with every year, since the inception of the Laboratory.

TABLE I.

Description of samples.	1923 (9 months).	1924 (12 months).	1925 (12 months).	1926 (12 months).
Chemical Examination ...	343	842	1174	3,258
Bacteriological Examination ...	419	895	891	1,653
Vibrio Test ...	106	280	325	954
Total ...	868	2,047	2,390	5,865

It will be apparent that the nature and extent of the work has increased steadily during the first three years, and that the total number of samples dealt with under all heads, during the current year shows an increase of 231 per cent. over the average of the preceding years.

This enormous increase of work had to be faced in order to meet the anxious situation created by the lowered level of the lake, due to want of adequate and timely rain with the simultaneous appearance of Vibrios in the lake water; several other items of research work undertaken both on my own initiative, and at the instance of the officers of the Corporation and Government, also contributed to a certain extent to this increase.

Staff.—There were no changes in the staff but I feel bound to record that the staff loyally and wholeheartedly co-operated with me in carrying out successfully the enormously increased volume of work refefred to already. If an increased volume of work has to be carried out in future years, as it is almost certain will be the case—the question of providing extra assistance to cope with such work will have to be considered.

Financial.—An approximate estimate of the expenditure incurred in the working of the laboratory is given in Table II below.

TABLE II.

Details of heads.	Rupees.	
	1925	1926
Salary of staff ...	3,528	3,672
Cost of chemicals and apparatus ...	2,000	4,000
Total ..	5,528	7,672

The increase during the current year in the cost of running the laboratory is obviously due to the increased volume of work turned out. A special grant of Rs. 2,000 had to be applied for in June 1926 and I must be permitted to say that I was handicapped for sometime owing to the unavoidable delay in getting the grant passed through, with the result that certain items of research work had to be held up for want of chemicals, until late in the year. In order to obviate such contingencies, I have applied for inclusion in the next year's budget, of a slightly increased grant towards the purchase of chemicals and apparatus.

Scientific.—The Red Hills Lake water from which the City's supply is derived has a catchment area of 23 square miles, and is fed by a channel 2½ miles long issuing from the Cholavaram tank, which is fed by another channel 8 miles in length, from the Tamarapakam anicut, on the Kortalayar River, at a distance of 23·5 miles from the City. The catchment area of the river and its tributaries comprises the Nagari Hills of the Karvatnagar Zamindari.

The lake water is drawn into the masonry conduit through the Jones Tower, which is fitted with 6 draw-off valves, placed at different heights and operated by suitable gearing, the object of this arrangement being to draw off water from as near the surface of the lake as possible at all seasons of the year.

The average daily rainfall in the lake region for the year was 0.067 inches. The rainfall in the catchment area between July and December varied from 2·63" to 8·55" a month. The level of the lake reached a maximum of 65·77 ft. in January the lowest recorded level being in September (57·54 feet above sea level). The organic content of the lake water was found as in previous years to be highest when the level of the lake was lowest, and vice versa (vide Chart I Appendix I).

The average monthly temperature (F.°) in the catchment area of the lake is given in the subjoined Table III.

TABLE III.

Month	Jan	Feby.	Mar.	April.	May.	June	July.	Aug.	Sep.	Oct.	Nov.	Dec.
Maximum F° ...	83·78	86·00	92·78	97·50	99·58	103·53	95 61	94·61	92·50	92·03	84·80	84 07
Minimum F° ...	72·26	73·64	76·36	79·57	81·36	83·07	77·78	77·23	76·83	75·42	73·67	69 29
Mean F° ...	78·02	79·82	84 57	88.51	90 47	93·30	86·69	85·92	85·67	83·73	79·24	76 68

A more frequent and regular periodical examination, than ever hitherto made of the Red Hills Lake water was undertaken and the results of the examination are given in Appendix I. From the available results it will be seen that the lake water at the Jones Tower was bacteriologically of fair quality in July and December, and of an indifferent quality in May, October and November. Organic matter of vegetable origin was however present in excess on all the occasions, being more marked in the summer than in the winter months. Samples drawn from the lake margins showed evidence of gross pollution.

The Conduit.—From Jones Tower, the lake water enters two masonry compartments, which formerly served as roughing filters. The water, then, flows into a masonry conduit, which leads the water for 8·5miles into Kilpauk; the water reaching Kilpauk was invariably found to have deteriorated to a greater or less extent, and an investigation into the causes operating to bring about this result was undertaken and continues in progress. To this end, samples were drawn from every one of the 57 manholes placed about 1,000 feet apart along the conduit; and the examination of samples drawn on the same day from a number of adjacent manholes yielded widely variant results (lactose fermenters varying from "present in 1 c.c." to "present in 60 c.c.") Vibrios, which made their appearance in July, were, however, uniformly present in all of them. These organisms have persisted throughout the year but appear to have diminished in number, at the lake, towards the end of the year.

Raw Water.—The results of the systematic examination of the raw water, at the Kilpauk end have been given in Table IV. (They have been divided into three groups, representing the periods when untreated raw water, Hankinised raw water, chlorinated raw water were respectively used to feed the filters.

TABLE IV.

Description of samples.	Period.	Percentage-lactose Fermenters.			
		·60 cc.	60 c. c.	5 c. c.	1 c. c.
Untreated raw Wtaer ...	1·1-26 to 16-7-26	3	3	56	10
Hankinised Raw Water ...	9-9-26 to 14-9-26	10	20	60	...
Chlorinated Raw Water...	17-7-26 to 2-9-26 15-9-26 to 20-9-26 20-10-26 to 31-12-26	33	4	42	4

Sand Filters.—The system of slow sand filtration continued to be in vogue as the only system of purification. There are 17 filters, 14 of which are capable of filtering one million gallons each daily, and the other three 1·33 m.g., each per day. If all the filters could thus work together it should be possible to filter about 18 million gallons a day, but as will be evident from the statement given below, only 12·73 m.g., per day are filtered through 15 beds at work while the City's consumption is computed at 15 to 19 million gallons a day. The extra quantity of water required to meet the entire supply to the town had therefore to be derived, as usual from raw water, which was chlorinated between July and December.

TABLE V.

Month, 1926.	Average number of beds working per day.	Quantity of water filtered in a month.	Monthly consumption of the City.	Daily average consumption of the City.	Remarks.
		Expressed in million gallons.			
January ...	16·0	440·05	475·05	15·32	
February ...	16·5	380·55	446 00	15·93	
March ...	15·0	418·55	514·00	16 58	
April ...	16·0	382·85	503·00	16·77	
May ...	16·0	394·54	516 90	16·67	
June ...	16·0	402·18	548·60	18·29	
July ...	16·0	430·03	528·60	17·05	
August ...	15·5	418·34	514·58	16 60	
September ...	15 0	383·23	508·10	16·94	
October ...	12·0	220·41	504·40	16·27	
November ...	12·0	311·68	484·60	16·15	
December ...	14·5	416·55	526·70	16·99	
Daily average during the year...	15·04	12·73	...	16·63	

It will be seen from the Table No. VI that each bed on an average made about 13 runs during the year with an average life of 18 days. This period includes the date of starting and closing down of the filter. If we excluded the periods, when the filters worked at lower rates than 4" vertical during every run the efficient life of each filter should be reckoned as about 10 days. One filter, Bed No. 13 was detailed for carrying out an experiment designed by Mr. Hensman, the Engineer, with a view to utilising the existing beds for semi-rapid sand filtration. The scheme of this experiment together with the results of the tests carried out will be found elsewhere in this report.

TABLE VI.

Bed No.	Total No. of runs made in the year.	Total No. of days worked in the year.	Average life per run.	Remarks.
1	11	150	13·6	Minimum No. of days worked.
2	12	221	18·4	
3	15	232	15·5	
4	10	261	26·1	
5	13	235	18·1	
6	16	226	14·1	
7	16	193	12·1	Minimum No. of days per run.
8	17	228	13·4	Minimum No. of runs made.
9	13	271	20·8	
10	7	217	31·0	Maximum No. of days per run Minimum No. of runs.
11	15	193	12 9	
12	14	232	16·6	
13	15	183	12·2	
14	12	271	22·6	
15	13	187	14·4	
16	11	276	25·1	Maximum No. of days worked.
17	14	249	17·8	
Average life of a Bed			18 0	

The production of H_2S in all the beds continued to be a disconcerting feature throughout the year, all attempts at checking its appearance notwithstanding. It was more pronounced in the summer than in the winter months.

Test tap at the Pumping Station.—The daily examination of samples from the test tap, representing the mixture of raw and filtered water supplied to the City, so as to have a daily control formed an important item of the work of the laboratory during the year.

TABLE VII.

1926	lactose fermenters–percentage.			
	-60 c. c.	60 c. c.	5 c. c.	1 c. c.
Average for 12 months ...	7·0	4·8	52·6	19 9
Summer ...	5·5	...	56·0	23 5
Winter ...	8·5	9 6	49·2	16·3

From the above table, it will be apparent that the water as supplied, differed very little from the raw water. The percentage of samples which showed lactose fermenters in 60 c.c. or more than 60 c.c., volumes, were mainly those drawn after systematic chlorination had been adopted.

The test tap samples, however, showed as usual increased figures for "free ammonia" as compared with the raw water, and the increased "ammonia" figures in this situation have been associated with the presence of sulphurated hydrogen, chlorination had little or no appreciable effect on H_2S. It however, helped to effect a slight reduction in the figures for "Albuminoid Ammonia" and "absorbed oxygen"

TABLE No. VIII.

Description.	Chemical average–parts per 100,000		
	Free Ammonia.	Albuminoid Ammonia.	Abserbed Oxygen.
Raw Water ...	0·002	0·043	0·162
Test Tap ...	0·007	0·027	0·113
Reduction (percentage) ...	Increase	37%	31%

Distribution System.—The City of Madras consists of 30 divisions, and at least one sample a month from each division was taken. All the divisions were thus examined in a month. About 200 samples were collected from house taps, and public fountains during the year and the results of the examination are given in Appendix I. 2·1 per cent. of the samples gave no lactose fermenters in 60 c.c., 6·4 per cent. in 60 c.c., 48·7 per cent in 5c.c., 17·1 per cent in 1 c.c., and the remaining in 10 and 20 c.c., volumes. These figures, at once, suggest that the quality of the water supplied is far from being uniformly satisfactory, and falls considerably, below all accepted standards.

Work in connection with Chlorination.—A necessarily very large volume of work was carried out in this connection. Systematic examination for available chlorine content of Bleach Solutions. and of the same sample several times had to be done every day, and the work of controlling the dose of chlorine applied involved the further examination of many more samples of the solution, and of the water immediately and sometimes after application of chlorine.

The following table gives a list of the more important tests carried out in this direction.

1. Estimation of available chlorine in Bleaching powder samples.	442
2. Dose of chlorine for raw and filtered water. ..	400
3. Estimation of efficiency of mixing immediately after application of chlorine. ..	290
4. Estimation of free chlorine in treated water after periods of contact ranging from 5 minutes to one hour	584
Total Number of tests	1,716

Complaints of consumers.—In addition to the systematic daily examination of samples from various points in the City supply system, including the inlets and outlets of filter beds, special examinations were carried out on several samples drawn from specified localities, with a view to detecting possible local sources of contamination, such as leaks in the pipe-line etc.

(*a*) Although it has been definitely established by the King Institute, Guindy, that the distribution mains are sufficiently water-tight and do not allow any sub-soil water to enter them, the question of leakage has still been frequently raised. The results of examination of samples to elucidate this point are subjoined in Table No. IX.

TABLE IX.

Description.	Test tap at Kilpauk pumping Station.	P. F. in De Costa Road at the entrance of the pipe line into the marsh (west of harness factory)	In the middle of the marshy low land, from a scour valve near the Power mills line.	Tap inside Madras electric supply Corporation.	Tap on the platform of Basin Bridge Railway Junction.
Date of collection			25–2–27.		
Lactose Fermenters present in c. c. ...	5 c. c.	5 c. c.	5 c. c.	5 c. c.	5 c. c.
Total Colonies per c.c. on agar at 37° C. ...	810	600	580	610	540
Smell ...	None in any of the samples.				
Chlorine per 100,000	3·9	3·9	3·5	3·9	3·9
Am. Nitrogen ,,	0·003	trace.	trace.	0·002	0·002
Alb. ,, ,,	0·026	0·016	0·016	0·015	0·013
Abs. Oxygen (Tidy's)	0·112	0·093	0·110	0·090	0·054

N.B.—The results of the examination of a sample drawn from the test tap on the main at the Head Works, having regard to the time involved, so as to allow of the results being sufficiently comparable, are given along side in each case.

It will be readily apparent that there is no evidence to show that leaks exist in any of the distribution mains.

(*b*) Complaints regarding the presence of smell in the water supplied to certain divisions of the City necessitated the examination of a number of samples from each of those divisions. Except in the case of the dead-end of a pipe-line in the 30th Division, the other samples gave no evidence to support the complaints. The tarry smell complained of in "Taylor's Garden", Adyar (30th Division) was found on investigation to be due to a newly laid pipe-line which had previously been painted with some preparation of tar. This was perhaps accentuated by the absence of a free circulation of water, owing to its being imprisoned in the dead-end of a main.

TABLE X.

Description.	Tap at the back of banglow "Taylor's Garden."	Tap just below the storage tank in the Bath Room in "Taylor's Garden."	P. F. in Pakiriah Paracheri, 200 Yards north of "Taylor's Garden."
Date of collection.	30th March 1927.		
Lactose Fermenters present in ? c. c. ...	20 c. c.	10 c. c.	60 c. c.
Total colonies per c. c. on agar at 37 C. ...	710	800	600
Smell ...	Tarry smell.	Tarry smell.	Nil.
Chlorine, per 100·000 ...	3·9	3·9	3·9
Am. Nitrogen „ ...	0·008	trace.	trace.
Alb. „ „ ...	0·018	0·021	0·017
Abs. Oxygen (Tidy's) ...	0·155	0·118	0·082
Total Solids ...	22·0	21 0	19·0

(*c*) Complaints regarding the appearance in the water of an objectionable coloured growth in the month of October were found to be due to a manganiferous growth following Hankinisation of the City supply ,which had to be resorted to for a short time owing to a failure of the supply of Bleaching powder.

Special.—The Occurrence of Vibrios in the water supply system.—In the course of the routine daily examinations, vibrios were found to have suddenly appeared in the raw water at Kilpauk on 14th July 1926. A search for these in the lake water, and from the various manholes, filter inlets and outlets was made, and yielded positive results. Henceforward daily and occasionally hourly examinations were carried out. Chlorination was promptly resorted to, although the vibrios did not yield all the reactions of the true cholera vibrio. The Director, King Institute, Guindy was requested to give his opinion on these vibrios. He was kind enough to depute Mr. T. N. S. Raghavachari, Senior Bacteriological Assistant, who carried out an independent examination for several days, and the Director of the King Institute, thereafter, reported that the vibrios were not true *V. Cholerae*. This was in perfect agreement with my findings.

Starting with necessarily imperfect arrangements for chlorinating both the filtered and unfiltered water separately, gradual improvements in the technique of chlorination were effected. All the time the filtered water was being chlorinated by adding the bleach liquor whether at the "top end" or "tail-end" of the filtered water conduit, it was found that most of the chlorine had been taken up by H_2S in water, leaving the filtered water practically untouched as regards its bacterial content, especially its content of vibrios. It was, therefore, finally decided to chlorinate all the raw water including that used to feed the filters. So the site of chlorination was shifted to a point on the raw water conduit within the water works compound adjoining the 57th manhole. The details of the mixing, feeding, and dosing of chlorine were incharge of the Engineering Department, and must be considered to be definite improvements, on the original primitive type initially used in July 1926.

Having decided to chlorinate the raw water, the next point for investigation was the original recommendation of "the Government Water and Sewage Purification Committee" to try chlorination at Red Hills Lake end of the conduit, in order to allow of sufficient contact which is one of the essential elements in successful chlorination. Proposals for carrying this out systematically have already been made by me in answer to a reference from Health Officer, and it is expected to be brought into operation from the beginning of the new year.

The results of examination of filtered water, during the period from 19—10—26 to 31—12—26, when all the raw water was being chlorinated have been tabulated separately in:—

TABLE XI.

Description.	Period.	Percentage–Lactose Fermenters.			
		–60 c. c.	60 c. c.	5 c. c.	1 c. c.
Filtrate, before the application of Chlolorine to the feed water.	1–1–26 to 16–7–26	16·4	19 2	35·6	3·0
Filtrate, after the application of chlorine to the feed water.	19–10–26 to 31–12–26	13·0	24·2	13·0	5·0

The persistence of H_2S even after the application of pre-chlorinated water to the filters would seem to indicate that pre-filtration chlorination is not the solution to the H_2S problem. If the H_2S problem cannot be solved by pre-filteration chlorination the question,. that arises obviously is, whether any advantage is to be derived at all by the process. In this connection some of the observations of Sir Alexandar Houston on pre-filteration chlorination are worthy of careful study.

1. "There is the possibility that water previously subjected to chlorination may for some reason or other, not filter so well as one which has not been exposed to any such treatment" (slow sand filters are meant).

2. "Sand in the filters have the ability "to adsorb" and hold in store taste imparting materials, derived from chlorine treatment."

3. "When chlorination is practised before filtration more of the chemical is usually required and filters have an adsorbtive effect."

When chlorination at the Red Hills Lake end has been installed, and has been continued for some long time next year, it should be possible to gauge the extent to which the system of slow sand filtration has benefitted or suffered from the pretreatment.

Notwithstanding the chlorination—double the dose calculated by the Sims Wood-head Field Test was being used, almost throughout the entire period—Vibrios have persisted with a tenacity almost resembling that of spores. The present Health Officer carried out a detailed investigation, which included a critical local inspection of the entire catchment area and feeder channels, and his report embodying his recommendations based on his inspection, and on the results of the examination of the water samples, carried out at his instance, is given as Appendix II.

Research Work.—Although much of what has been recorded in the previous paragraphs really constitutes research work, I am giving below a short account of the special items which were undertaken by me to elucidate or amplify any special points that arose in the course of the routine work or that were suggested by the Engineer of the Corporation.

A. Coke-cum-Semi-rapid Sand Filter.—Mr. Hensman converted Bed 13 into a double filter by dividing the bed into two compartments, a smaller one (1|3 the total area) containing coke, and a larger one (2|3 the total area) containing the usual filtering materials. The object of the experiment was to try and utilise the existing plant for filtering the entire supply to the City, and at the same time eliminate, if possible the H_2S nuisance. The coke bed was worked at 24 in. vertical, while the sand filter ran at 8 in. vertical instead of the usual slow rate of 4 in. per hour.

During the year this bed was responsible for 16 runs with a total working period of 249 days giving an average of 15·6 days per run. H_2S although absent for the first two runs began to appear on the third run, and continued to persist throughout the remaining runs, so that no superiority was established on this point. The results of analysis of samples drawn from this bed have not established any definite superiority either. The then Health Officer, Dr. K. Raghavendra Rao, B.A., M.B., & C,M,, (Mad.), D.P.H., (Cam.), quite early in the experiment i.e., at the end of the fifth run foresaw that not much benefit would accrue by the experiment, and recorded his opinion as follows:—

"Two things, I notice which in my opinion are not encouraging viz., (1) the increase in "free ammonia" after water is being treated in this manner. This ought not to be; and "free ammonia" should be practically absent from any potable water. An enquiry into this is necessary and if it should be as it looks from this report that the water after treatment gets an increase in its "free ammonia" content, I think the treatment of water by this method may be of doubtful utility. (2) The small of H_2S still continues after sometime, which is a disconcerting feature."

There has been no fresh evidence in the results of the examinations carried out subsequent thereto, which would justify the experiment being considered a success, from any point of view.

B. As the first instalment of a scheme of research work, which was to embrace the limnology of the Red Hills Lake, and the changes brought about in the plankton content of raw water in its journey to Kilpauk, which had been planned out by me in collaboration with Mr. T. N. S. Raghavachari, Senior Bacteriological Assistant, King Institute, Guindy, a daily estimation of the turbidity and the oxygen content of the raw water was made as also a microscope examination whenever possible of the fauna and flora of the water; accurate data, relating to the depth of water in the lake; the rainfall in the catchment area, and the variations in temperature for a whole year have also been obtained. The materials that have been collected in this enquiry will form the subject of a separate scientific communication, when the work is completed and more scientific data have accrued. Meanwhile, some of the most important of the completed findings alone are given below.

1. The dissolved oxygen content of the lake water has been uniformly lower than the normal all through the year.

2. There is a further reduction in the dissolved exygen content of the water reaching Kilpauk through the covered masonry conduit.

3. The result of artifiicially aerating the raw water reaching Kilpauk on the laboratory scale showed that the raw water, (initially deficient in its dissolved oxygen content) could take up about 7 to 14 per cent more of oxygen. Further experiments in this direction to cover the various other changing conditions are in progress.

4. The turbidity of the lake water is due mainly to fine clay and to the presence of microscopic forms of life in abundance together with a fair amount of vegetable organic matter in a finely divided state.

5. The turbidity is lowest between June and August and the maximum is reached with the highest rainfall.

6. The lower forms of animal life that have been so far studied by us, represent nearly every order of the lower aquatic fauna. Among the Protophyta—the members appears to be restricted to about half a dozen genera.

7. In the conduit numerous flies were found to infest the free space.

(C) The determination of the pH of the raw, filtered and mixed waters, once a week was commenced late in the year, at the same time as the Senior Bacteriological Assistant of the King Institute, carried out similar determinations independently at the instance of the Director of Public Health. It is too soon to be able to reach any conclusions of value but is hoped that such a record would be of great assistance in connection with any rapid filtration experiments that may be projected later on.

(D) *Experiments on algicidal treatment.*—The sacred tank attached to the Sree Parthasarathy Temple at Triplicane is usually infested with luxurious algal growths, the offending alga being *coelosphaerium* of the order *cyanophyceae.*

The comparative efficiency of bleaching powder, copper sulphate, and sulphuric acid as algicides was tested. Bottle experiments were made, and the relative strength of the three reagents required to kill the algal growths are as under.

Cu. SO_4.	H_2 SO_4.	Cl_2. 12 (in parts per million).
0·6	40	0·4

In every case the improvement that followed was temporary, as the spores resisted the treatment and began to flourish again. It is therefore extremely doubtful if, with a stagnant tank without a free circulation of fresh water, it will ever be possible to successfully exterminate algal growths.

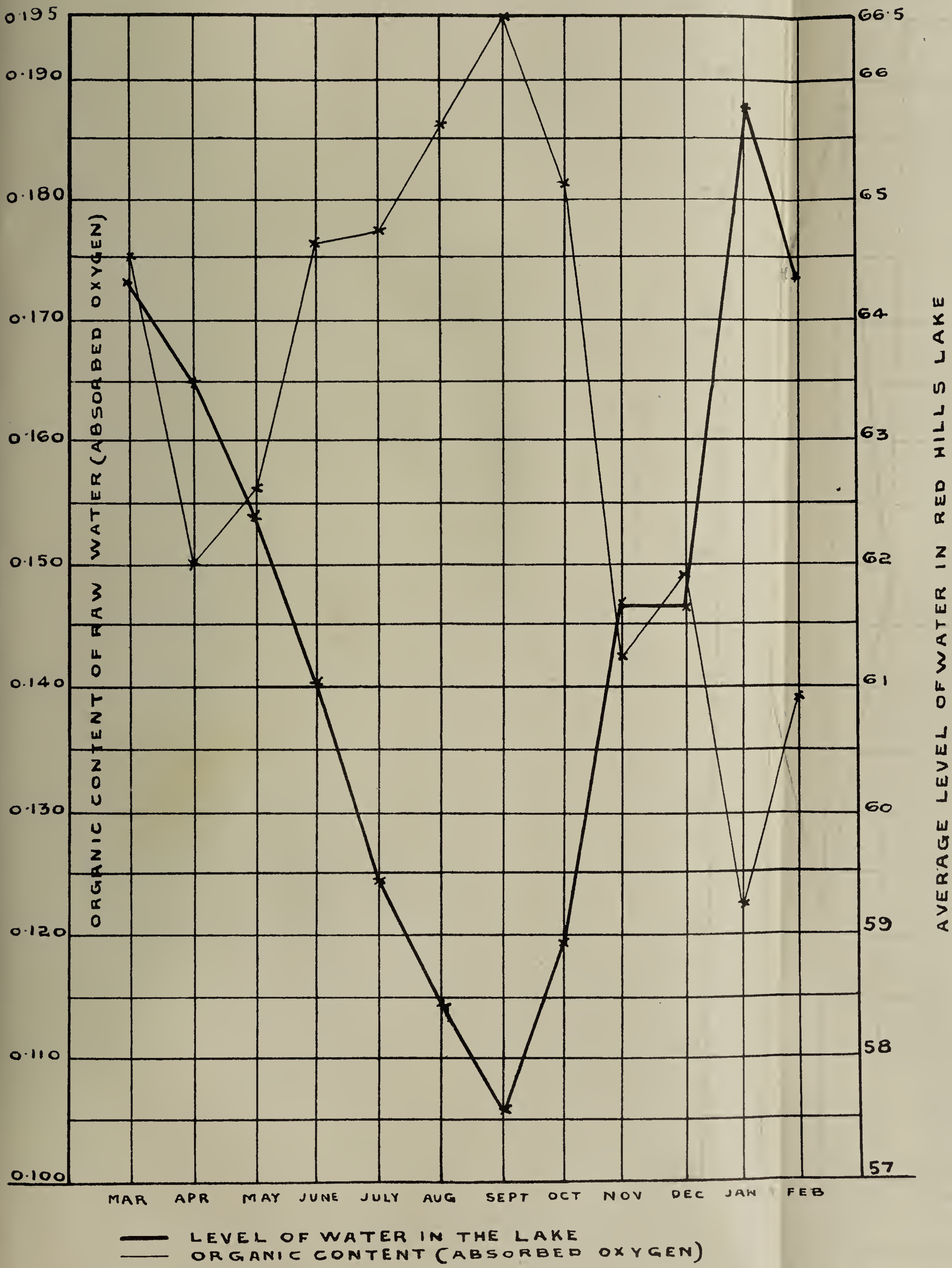
S. V. GANAPATI,
Water Analyst,.
Corporation of Madras.

KILPAUK WATER WORKS,
26*th June* 1927.

GRAPH SHOWING THE RELATION BETWEEN ORGANIC CONTENT AND LEVEL OF WATER IN THE LAKE

APPENDIX I

CHART I



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Vandyke., Survey Office, Madras.
1927.

APPENDIX I—Table IV.

Analysis of Red Hills Lake Water.

1926.		Serial Number.	Description of samples.	Bac'eriological Examination.			Chemical Examination-parts per 100,000.				Remarks.
Month.	Date.			Lactose Fermenters present in how many c. c.?	Total count per c. c. on agar at 37°c.	Vibrio test.	Ammoniacal Nitrogen.	Albuminoid Nitrogen.	Absorbed Oxygen (Tidy's)	Nitric Nitrogen.	
May ...	20	1	From the Lake, near Overseer's Quarters ...	5 c c	1920	Nil.	Trace.	0·0400	0·2211	Nil.	
		2	From the Lake, near Jones Tower.	5 c c	1890	,,	,,	0·0400	0·1789	,,	
		3	From the Roughing Filter before entering the conduit ...	5 c c	1780	,,	,,	0·0400	0·1684	,,	
July ...	24	1	From the Lake, near Jones Tower.	10 c c	1400	Present.	...	...	...	...	
		2	From the Roughing Filter before entering the conduit ...	5 c c	1260	,,	Trace.	0·0448	0·2000	Nil.	
,, ...	31	1	From the Lake near Jones Tower.	10 c c	1200	,,	,,	0·0400	0·1600	,,	
		2	From the Roughing Filter before entering the conduit ...	5 c c	3200	,	0·0017	0·0424	0·1700	,,	
		3	From the Lake near the inlet of the Cholavaram supply channel into the lake ...	5 c c	1680	,,	0·0022	0·0492	0·2300	,,	
		4	From the margin of the Lake close to Errakuppam village ...	1 c c	2700	,,	...	...	...	...	
		5	From a side stream from Macclean channel ...	0·1 c c	2900	,,	...	...	...	...	

Analysis of Red Hills Lake Water—(*contd.*)

1926		Serial Number.	Description of samples.	Bacteriological Examination.			Chemical Examination-parts per 100,000.				Remarks.
Month.	Date.			Lactose. Fermenters present in how many c. c.	Total count per c. c. agar at 37° c.	Vibrio test.	Ammoniacal Nitrogen.	Albuminoid Nitrogen.	Absorbed xygen (Tidy's)	Nitric. Nitrogen.	
		6	From the Macclean channel 100 yds away from the lake proper...	5 c c	2500	Present.	...	...	...	...	
		7	A stream which carries the washings from Pothur village into the Lake ...	5 c c	2700	„	...	...	...	...	
		8	From the Lake opposite to Macolean channel ...	20 c c	940	„	...	...	...	...	
		9	From the middle of the Lake ...	—60 c c	810	„	...	...	...	...	
		10	From the Cholavaram Lake, near the head sluice ...	0·1 c c	2300	„	...	...	...	...	
		11	From the Cholavaram supply channel, near the Lake ...	0·1 c c	Countless.	„	...	...	...	...	
		12	From the Lake near the inlet of the Cholavaram supply channel.	5 c c	2400	„	...	...	...	...	
October ...	16	1	From the margin of the Lake opposite to Corporation Bungalow ...	5 c c	1910	„	0·0028	0·0584	0·1765	Nil.	
		2	From the Lake near the inlet of the Cholavaram supply channel.	1 c c	Countless.	„	0·0039	0·0604	0·1765	„	
		3	From the Lake near Jone's Tower.	5 c c	„	„	0·0034	0·0560	0·2000	„	

Analysis of Red Hills Lake Water.—(*contd*).

1926.		Serial Number.	Description of samples.	Bacteriological Examination.			Chemical Examination-parts per 100,000.				Remarks.
Month.	Date.			Lactose Fermenters present in how many c. c.	Total count per c c on agar at 37°c.	Vibrio test.	Ammoniacal Nitrogen.	Albuminoid Nitrogen.	Absorbed Oxygen (Tidy's).	Nitric Nitrogen.	
		4	From the Roughing Filter before entering the conduit ...	1 c c	2400	Present.	0·0028	0.0392	0·2000	Nil	
November..	19	1	From the Lake opposite to Corporation Bungalow ...	1 c c	1200	,,	0·0011	0·0472	0·1900	,,	
		2	From the Lake near Jones Tower.	5 c c	1800	,,	0·0006	0·0472	0·1700	,,	
		3	From the Roughing Filter before entering the conduit ...	5 c c	2000	,,	0·0011	0·0492	0·1600	,,	
		4	From the Lake near the inlet of the Cholavaram supply channel.	1 c c	Countless.	,,	0·0028	0·0292	0·1268	,,	
December ..	11	1	From the centre of the Lake ...	10 c c	1600	,,	Trace	0·0360	0·1636	,,	
		2	From the Lake opposite to Corporation Bungalow ...	10 c c	2100	,,	,,	0·0424	0·1636	,,	
		3	From the Lake near Jones Tower.	10 c c	21400	,,	,,	0·0380	0·1667	,,	
		4	From the Roughing Filter before entering the conduit ...	10 c c	1800	,,	0·0017	0·0292	0·1778	,,	
		5	From the Lake near the inlet of the Cholavaram supply channel.	1 c c	2400	,,	0·0011	0·0180	0·1111	,,	

APPENDIX I.

ANALYSIS OF THE MADRAS CITY WATER SUPPLY.

Samples collected from 57 manholes along the raw water conduit.

Date of collection.	24-7-26.	24-7-26.	24-7-26.	24-7-26.	24-7-26.	24-7-26.	24-7-26.	24-7-26.	24-7-26.	24-7-26.	24-7-26.
Source as per label, Manhole No. ...	1	2	3	4	5	6	7	8	9	Roughing Filter Weir	Red Hllis Lake. Jones Tower
Total colonies per C. C. on agar at 37° C. ...	1380	1100	1600	1400	940	2000	1800	1200	1000	1260	1400
Lactose Fermenters present in how many C. C. and upwards ...	10 cc.	10 cc.	10 cc.	10 cc.	10 cc.	5 cc.	5 cc.	5 cc.	5 cc.	5 cc.	10 cc,
Result Vibrio test ...	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
Colour and Transparency ...	Y & O	Y & O	Y &SH	Y& SH	Y& SH	Y &SH	Y&SH	Y& SH	SY &H	Y&O	...
Smell ...	Nil	Nil	Nil	Nil	Nil.	Nil	Nil	Nil	Nil	Nil	.
Ammoniacal Nitrogen in parts per 100,000 ...	0·0022	0·0034	0·0022	0·0028	0 0028	0·0022	0·0028	0·0028	0·0022	Trace.	...
Albuminoid Nitrogen in parts per 100,000 ...	0·0492	0 0472	0·0536	0·0492	0·0536	0 0472	0·0516	0·0492	0·0516	0·0448	...
Oxygen absorbed (Tidy's) in parts 100,000 ...	0·1895	0·2105	0·1730	0·1730	0·1730	0·1641	0·1641	0·1641	0·2000	0·2000	...
Nitric Nitrogen ...	Nil	Nil	Nil	Nil	Nil.	Nil	Nil	Nil	Nil	Nil	...
Nitrites ...	Nil	Nil	Nil	Nil	Nil.	Nil	Nil	Nil	Nil	Nil	...

APPENDIX I.

ANALYSIS OF THE MADRAS CITY WATER SUPPLY.

Samples collected from 57 manholes along the raw water conduit—(*contd.*)

Date of collection.	1-8-26	1-8-26	1-8-26	1-8-26	1-8-26	1-8-26	1-8-26	15-8-26	15-8-26	15-8-26	15-8-26	15-8-26	15-8-26	15-8-26	15-8-26	15-8-26	15-8-26
Source as per label, Manhole Nos. ...	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Total colonies per C. C. on agar at 37° C.	2000	1400	1900	920	1050	1200	1100	...	1500	1800	2000	2400	1400	2200	1600	1800	1400
Lactose Fermenters present in how many C. C. and upwards ...	5 cc,	10 cc.	1 cc,	10 cc	60 cc	10 cc	10 cc	...	10 cc	5 cc	10 cc	5 cc	5 cc	5 cc	10 cc	5 cc	20 cc
Result of Vibrio test ...	Present	Present	Present	Present	Present	Present	Present	...	Present	Present	Present	Present	Present	Present	Present	Present	Present
Colour and Transparency ...	Y & H	Y & H	Y & H	Y &SH	Y &SH	Y &SH	Y &SH	...	Y & O	...	Y & O	...	...	Y & O	...	Y & O	...
Smell ...	Nil	Nil	Nil	Nil	Nil	Nil	Nil	...	Nil	...	Nil	...	...	Nil	..	Nil	...
Ammoniacal Nitrogen in parts per 100,000. ...	0·0022	Trace	Trace	Trace	0·0011	0·0022	0·0022	...	0·0022	...	0·0022	...	...	...	...	0·0039	...
Albuminoid Nitrogen in parts per 100,000 ...	0·0472	0·0472	0·0492	0·0472	0·0492	0·0424	0·0472	...	0·0536	...	0·0560	...	...	...	...	0·0448	...
Oxygen absorbed (Tidy's) in parts 100,000 ...	0·1538	0·1538	0·1641	0·1743	0·1743	0·1846	0·1743	...	0·2162	...	0·2162	...	...	...	...	0·2000	...
Nitric Nitrogen ...	Nil	Nil	Nil	Nil	Nil	Nil	Nil	...	Nil	...	Nil	...	...	Nil	...	Nil	...
Nitrites ...	Nil	Nil	Nil	Nil	Nil	Nil	Nil	...	Nil	...	Nil	...	...	Nil	...	Nil	...

APPENDIX I.

ANALYSIS OF THE MADRAS CITY WATER SUPPLY.

Samples collected from 57 manholes along the raw water conduit—(*Contd.*)

Date of collection.	15-8-26.	15-8-26.	15-8-26.	15-8-26.	10-8-26.	10-8-26.	10-8-26.	10-8-26.	10.8.26.	10.8.26.	26-8-26.	26-8-26.	26-8-26.	26-8-26.	26-8-26.	26-8-26.	26-8-26.
Source as per label. Manhole, Nos., ...	27	28	29	30	31	**32**	33	34	35	36	37	38	39	40	41	42	43
Total colonies per C. C. on agar at 37° C.	3000	2200	2400	2600	1400	2000	1600	1400	1700	1600	3400	3200	4000	3700	3000	2800	1500
Lactose Fermenters present in how many C. C. and upwards ...	10 cc.	10 cc.	5 cc	5 cc.	10 cc.	5 cc.	10 cc.	5 cc	5 cc.	5 cc.	5 cc.	5 cc.	1 cc.	1 cc.	5 cc.	5 cc.	5 cc.
Result of Vibrio test ...	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
Colour and Transparency ...	Y & O	...	...	Y & O	Y & H	Y & H	Y & H	Y & H	Y & H	Y & H	SY &H	SY& H	SY& H	Y & H	Y & H	Y & H	Y & H
Smell ...	Nil	...	...	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Ammoniacal Nitrogen in parts per 100,000 ...	0·0050	...	...	0 0050	Trace	Trace	Trace	Trace	Trace	Trace	Trace	0·0017	0·0022	0·0011	Trace	Trace	0·0022
Albuminoid Nitrogen in parts per 100,000 ...	0·0424	...	...	0·0448	0 0472	0·0492	0·0424	0·0424	0 0400	0·0400	0·0516	0·0516	0·0492	0·0380	0·0400	0 0380	0·0516
Oxygen absorbed (Tidy's) in parts 100,000 ...	0·2000	...	...	0·2000	0·1838	0·2054	0·1838	0·2054	0·2054	0·2054	0·1622	0·1514	0·1514	0·1900	0·1800	0·1900	0·1714
Nitric Nitrogen ...	Nil	...	...	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Nitrites ...	Nil	...	...	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

APPENDIX I.

ANALYSIS OF THE MADRAS CITY WATER SUPPLY.

Samples collected from 57 manholes along the raw water conduit—(*Contd*)

Date of collection	26-8-26.	26-8-26.	26-8-26.	28-8-26.	28-8-26.	28-8-26.	28-8-26.	28-8-26.	28-8-26.	28 8-26.	28-8-26.	28-8-28.	28-82-6.	28-8-26.
Source as per label, Manhole Nos. ...	44	45	46	47	48	49	50	51	52	53	54	55	56	57
Total colonies per C. C. on agar at 37° C. ...	2600	Countless	2800	1500	Countless	1400	1600	1800	1500	1400	1700	1050	1400	1300
Lactose Fermenters present in how many C. C. and upwards...	5 cc.	1 cc.	5 cc.	5 cc.	5 cc.	5 cc.	5 cc.	1 cc.	5 cc.	5 cc.	5 cc.	5 cc.	5 cc,	5 cc.
Result of Vibrio test ...	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present	Present
Colour and Transparency ...	Y & H	Y & H	Y & H	Y & H	Y & H	Y & H	SY &H	SY &H	Y & H	Y & H	Y & H	Y & H	Y & H	...
Smell ...	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	...
Ammoniacal Nitrogen in parts per 100,000 ...	0·0039	0·0050	0·0028	0·0034	0·0028	0·0028	0·0045	0·0022	0·0034	0·0090	0·0090	0·0022	0·0028	..
Albuminoid Nitrogen in parts per 100,000 ...	0·0448	0·0172	0·0336	0·0360	0·0400	0·0448	0·0400	0·0380	0·0400	0·0448	0·0360	0·0336	0 0360	...
Oxygen absorbed (Tidy's) in parts 100,000 ...	0·1333	0·1714	0·1538	0·1538	0·1744	0·1684	0.1684	0·1684	001789	0·1789	0·1684	0 13	0·1579	...
Nitric Nitrogen ..	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	...
Nitrites ...	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	...

APPENDIX I—Table IV.

Bacteriological Results—Raw Water—Lactose Fermenters and average number of microbes per c. c.

1926.		Lactose Fermenters in-60 c.c. & upwards.	Average total count per c.c. on agar at 37°c.	Lactose Fermenters in 60 c.c. & upwards.	Average total count per c. c. on agar at 37°c.	Lactose Fermenters in 20 c.c. & upwards.	Average total count per c.c. on agar at 37°c.	Lactose Fermenters. in 10 c.c. & upwards.	Average total count per c.c. on agar at 37°c	Lactose Fermenters in 5 c.c. & upwards.	Average total count per c. c. on agar at 37°c.	Lactose Fermenters in 1 c.c. & upwards.	Average total count. per c. c. on agar at 37°c.	Lactose Fermenters in 0·1 c. c.	Average of total count per c. c.
January	...	...	...	20	870	10	1,000	30	910	40	970	...	...	...	...
February	...	...	...	...	...	6	800	11	610	72	910	11	1,750	...	...
March	...	...	...	...	...	8	750	8	900	77	1,130	7	900	...	...
April	...	...	...	...	...	...	...	14	970	43	1,180	43	1,670	...	...
May	...	...	...	...	...	...	...	9	980	64	1,390	27	2,000	...	...
June	...	...	...	...	...	...	...	67	980	33	1,690	...	...	...	...
July	...	4	810	...	...	4	940	32	1,200	46	1,860	3	2,700	11	2,800
August	...	2	200	2	1,050	3	1,000	19	1,630	64	2,010	11	2,720	...	...
September	...	25	170	...	...	...		13	900	62	1,220	...	...	...	...
October	...	8	200	25	840	17	860	8	940	17	2,450	25	2,450	...	...
November	...	43	530	...	...	...	...	...	...	36	2,050	21	1,740	...	...
December	...	...	...	25	270	...	...	50	1,730	13	2,700	12	2,400	...	...

APPENDIX 1.—Table V

Showing the Bacteriological Results of Filter Beds—Lactose Fermenters and average number of colonies per cc.

Description of samples.	Bed No. I												Bed No. 11											
1926	L. F. in-60 cc. per cent.	T. C. per cent.	L. F. in 60 cc. per cent.	T. C. per cent.	L. F. in 20 cc. per cent.	T. C. per cent.	L. F. in 10 cc. per cent.	T. C. per cent.	L. F. in 5 cc. per cent.	T. C. per cent.	L. F. in 1 cc. per cent.	T. C. per cent.	L. F. in-60 cc. per cent.	T. C. per cent.	L. F. in 60 cc. per cent.	T- C. per cent.	L. F. in 20 cc. per cent.	T. C. per cent.	L. F. in 10 cc. per cent.	T. C. per cent.	L. F. in 5 cc. per cent.	T. C. per cent.	L. F. in 1 cc. per cent.	T. C. per cent.
January ...	100	90	...	...	...	...	...	...	...	...	...	...	...	...	50	160	...	...	50	960	...	...	...	...
February ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	100	560	...	...	...	...
March ...	...	...	100	430	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
April ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
May ...	100	600	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
June ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	130	700	...	...	...	...	...	...	...	...
July ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
August ...	...	...	...	...	...	...	...	...	...	...	...	...	100	100	...	...	...	...	...	...	...	...	...	...
September ...	...	...	...	...	...	...	100	800	...	...	...	...	...	...	...	...	...	...	...	...	100	800	...	...
October ...	14	700	14	700	43	820	14	760	15	2000	...	...	...	...	...	...	...	...	...	...	...	...	...	...
November ...	36	880	21	620	21	560	14	760	8	460	...	...	...	...	...	...	...	...	33	700	34	1060	30	1200
December ...	...	...	89	560	11	670	...	...	...	...	...	...	...	...	50	790	...	...	...	...	...	...	53	1200

APPENDIX I—Table V.

Showing the Bacteriological Results of Filter Beds—Lactose Fermenters and average number of colonies per c.c.—(*Contd.*)

Description of samples.	Bed No. III												Bed No. IV.											
1926.	L. F. in-60 cc. per cent.	T. C. per cent.	L. F. in 20 cc. per cent.	T. C. per cent.	L. F. in 60 cc. per cent.	T. C. per cent.	L. F. in 10 cc. per cent.	T. C. per cent.	L. F. in 5 cc. per cent.	T. C. per cent.	L. F. in 1 cc. per cent.	T. C. per cent.	L. F. in-60 cc. per cent.	T. C. per cent.	L. F. in 60 cc. per cent.	T. C. per cent.	L. F. in 20 cc per cent.	T. C. per cent.	L. F. in 10 cc. per cent.	T. C. per cent.	L. F. in 5 cc. per cent.	T. C. per cent.	L. F. in 1 cc. per cent.	T. C. per cent.
January ...	33	70	...	...	...	...	34	820	33	1020	...	...	...	...	...	...	33	90	...	...	67	750	...	...
February ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
March ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
April ...	...	...	100	400	...	...	...	...	...	...	...	...	...	...	...	...	33	600	...	...	67	1020	...	...
May ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	100	720	...	...	...	...
June ...	100	540	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	100	700	...	...
July ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
August ...	...	...	...	...	...	...	100	20	...	...	...	...	...	...	...	...	100	240	...	...	...	...	...	...
September ...	...	...	...	...	...	...	100	960	...	...	...	...	...	...	...	...	...	...	...	...	100	600	...	...
October ...	...	...	100	700	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	100	900
November ...	...	...	...	...	100	720	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
December ...	...	...	...	...	...	...	...	...	100	900	...	...	...	...	50	700	...	...	...	...	...	...	50	1100

APPENDIX 1—Table V

Showing the Bacteriological Results of Filter Beds—Lactose Fermenters, and average number of colonies per cc. Table III—(*Contd*)

Description of samples.	Bed No. V.												Bed No. VI.											
1926.	L. F. in-60 cc. per cent.	T. C. per cc.	L. F. in 60 cc. per cent.	T. C. per cc.	L. F. in 20 cc. per cent.	T. C. per cc.	L. F. in 10 cc. per cent.	T. C. per cc.	L. F. in 5 cc. per cent.	T. C. per cc.	L. F. in 1 cc. per cent.	T. C. per cc.	L F. in-60 cc. per cent.	T. C. per cc.	L. F. in 60 cc. per cent.	T. C. per cc.	L. F. in 20 cc. per cent.	T. C. per cc.	L. F. in 10 cc. per cent.	T. C. per cc.	L. F. in 5 cc. per cent.	T. C. per cc.	L. F. in 1 cc. per cent.	T. C. per cc.
January ...	50	240	...	...	...	...	...	...	50	960	...	...	...	...	...	...	33	380	34	100	33	200	...	...
February ...	...	...	...	...	...	...	...	...	...	...	...	...	100	200	...	...	...	...	...	...	...	...	...	...
March ...	...	...	...	...	...	...	...	...	...	...	...	...	100	600	...	...	...	...	...	...	...	...	...	...
April ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	100	200	...	...	...	...
May ...	100	400	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
June ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
July ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...	...
August ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
September ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
October ...	...	...	...	...	...	...	00	800	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
November ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
December ...	...	...	...	...	100	900	...	...	...	...	...	...	...	...	33	210	67	810	...	...	...	...	...	...

APPENDIX I—TABLE V.

Showing the Bacteriological Results of Filter Beds—Lactose Fermenters and average number of colonies per c.c.—(*Contd.*)

Description of Samples.	Bed No. VII.												Bed No. VIII.											
1926.	L. F. in-60 c.c. per cent.	T. C. per c.c.	L. F. in 60 c.c. per cent.	T. o. per c.c.	L. F. in 20 c.c. per cent.	T. C. per cent.	L. F. in 10 c.c. per cent.	T. C. per cent.	L. F. in 5 c.c. per cent.	T. C. per cent.	L. F. in 1 c.c. per cent.	T. C. per cent.	L. F. in-60 c.c. per cent.	T. C. per cent.	L. F. in 60 c.c. percent.	T. C. per cent.	L. F. in 20 c.c. per cent.	T. C. per cent.	L. F. in 10 c.c. per cent.	T. C. per cent.	L. F. in 5 c.c. per cent.	T. C. per cent.	L. F. in 1 c.c. per cent.	T. C. per cent.
January	...	...	...	...	...	...	...	...	100	320	...	...	...	...	100	140	...	...	...	...	...	...	...	...
February	...	...	100	200	...	...	...	...	...	...	...	...	...	...	50	440	...	...	...	...	50	600	...	...
March	...	...	...	...	...	...	...	...	100	600	...	...	...	...	...	...	...	...	...	...	100	700	...	...
April	...	...	...	...	100	1020	...	...	...	...	...	...	...	...	...	...	50	800	...	...	50	6 0	...	...
May	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	100	360	...	...
June	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
July	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
August	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
September	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
October	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...
November	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
December	...	...	...	...	100	620	...	...	...	...	...	...	...	...	...	...	67	900	...	...	33	800	...	...

APPENDIX I—Table V.

Showing the Bacteriological results of Filter Beds—Lactose Fermenters and average number of colonies per c. c.—(*Contd.*)

Description of samples.	Bed No. IX.												Bed No. X.											
1926.	L. F. in—60 c. c. per cent.	T. C. per cent.	L. F. 60 c. c per cent.	T. C. per cent.	L. F. in 20 c. c. per cent.	T. C. per cent.	L. F. in 10 c. c. per cent.	T. C. per cent.	L. F. in 5 c. c. per cent.	T. C. per cent.	L. F. in 1 c. c. per cent.	T. C. per cent.	L. F.—60 c. c. per cent.	T. C. per cent.	L. F. in 60 c. c. per cent.	T. C. per cent.	L. F. in 20 c. c. per cent.	T. C. per cent.	L. F. in 10 c. c. per cent.	T. C. per cent.	L. F. in 5. c. c. per cent.	T. C. per cent.	L. F. in 1 c. c. per cent.	T. C. per cent.
January	...	...	...	..	...		...	...	100	875	...	...	...	...	100	400	...	...	...	...	...	...	...	...
February	...	...		...	...	...	...	...	33	270	67	1800	...	...	...	...	...	...	...	...	...	...	.	...
March	...	..	...	...	..	...	...	...	...	...	...	...	...	.	...	...	...	...	...	...	...	...	...	...
April	...	...	...	...	...	...	...	...	100	450	...	...	...	...	...	...	...	...	...	...	...	...	...	...
May	...	...	...	...	100	640	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
June	...	...	...	...	...	...	...	...	...	...	...	...	...	...	100	400	...	...	...	...	...	...	...	...
July	..	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...
August	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
September	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...
October	...	...	...	...	100	700	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	100	900
November	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
December	...	...	33	400	34	800	...	...	33	1200	...	...	...	...	..	...	33	500	...	...	67	1155	...	...

APPENDIX I—TABLE V.

Showing the Bacteriological Results of Filter Beds—Lactose Fermenters and average number of colonies per c.c—(*Contd.*)

Description of samples.	Bed No. XI.												Bed No. XII.											
1926.	L. F. in-60 c.c. per cent.	T. C. per cent.	L. F. in 60 c.c. per cent.	T. C. per cent.	L. F. in 20 c.c. per cent.	T. C. per cent.	L. F. in 10 c.c. per cent.	T. C. per cent.	L. F. in 5 c.c. per cent.	T. C. per cent.	L. F. in 1 c.c. per cent.	T. C. per cent.	L. F. in-60 c.c. per cent.	T. C. per cent.	L. F. in 60 c.c. per cent.	T. C. per cent.	L. F. in 20 c.c. per cent.	T. C. per cent.	L. F. in 10 c.c. per cent.	T. C. per cent.	L. F. in 5 c.c. per cent.	T. C. per cent.	L. F. in 1 c.c. per cent.	T. C. per cent.
January	50	140	50	350	...	...	...	...	...	...	...	...	...	...	...	...	100	400	...	...	...	...	...	...
February	...	...	100	360	...	...	...	...	...	...	...	...	...	...	...	...	100	510	...	...	...	...	...	...
March	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
April	...	...	...	...	...	...	...	...	100	1460	...	...	...	...	...	...	...	...	...	...	...	...	...	...
May	...	...		...	...	...	...	...	100	450	...	...	...	...	...	...	...	...	...	...	...	...	...	...
June	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	...	...	...	...
July	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
August	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.	...
September	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
October	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
November	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
December	...	...	...	...	...	...	...	...	...	...	...	...	...	...	100	420	...	...	...	...	...	...	...	...

APPENDIX I.—TABLE V.

Showing the Bacteriological results of Filter Beds—Lactose Fermenters and average number of colonies per cc.—(*Contd*)

Description of samples.	Bed No. XIII.												Bed No. XIV.											
1926	L. F. in 60 c.c. per cent.	T. C. per cent.	L. F. in 60 c.c. per cent.	T. C. per cent.	L. F. in 20 c.c. per cent.	T. C. per cent.	L. F. in 10 cc. per cent.	T. C. per cent.	L. F. in 5 c.c. per cent.	T. C. per cent.	L. F. in 1 c.c. per cent.	T. C. per cent.	L. F. in 60 c.c. per cent.	T. C. per cent.	L. F. in 60 c.c. per cent.	T. C. per cent.	L. F. in 20 c.c. per cent.	T. C. per cent.	L. F. in 10 c.c. per cent.	T. C. per cent.	L. F. in 5 c.c. per cent.	T. C. per cent.	L. F. in 1 c.c; per cent.	T. C. per cent.
January													50	310	...	...	...	...	...	...	50	600	...	...
February													...	...	...	...	...	...	...	...	...	...	...	...
March				Experimental Bed. The results are put up separately.									...	...	...	...	...	...	...	...	...	...	...	...
April													...	...	...	...	...	...	...	...	...	...	100	1350
May													...	...	...	...	...	...	...	...	...	...	...	...
June													...	...	...	...	...	...	...	...	...	...	...	...
July													...	...	...	...	...	...	...	...	...	...	...	...
August	...	...	...	...	...	...	100	870	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
September	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
October	...	...	20	700	40	760	40	800	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
November	67	860	33	720	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
December	...	...	...	...	...	...	...	...	...	...	...	...	...	...	50	540	50	510	...	...	...	...	...	...

APPENDIX 1—Table V.

Showing the Bacteriological Results of Filter Beds—Lactose Fermenters and average number of colonies per c. c.—(*Contd.*)

Description of Samples.	Bed No. XV.												Bed No. XVI.											
1926.	L. F. in-60 cc. per cent.	T. C. per cent.	L. F. in 60 cc. per cent.	T. C. per cent	L. F. in 20 c.c. per cent.	T. C. per cent.	L. F. in 10 c.c. per cent.	T. C. per cent.	L. F. in 5 c.c per cent.	T. C. per cent.	L. F. in 1 c.c. per cent.	T. C. per cent.	L. F. in-60 c.c. per cent.	T. C. per cent.	L. F in 60 c.c. per cent.	T. C. per cent.	L. F. in 20 c.c. per cent.	T. C. per cent.	L. F. in 10 c.c. per cent.	T. C. per cent.	L. F. in 5 c.c. per cent.	T. C. per cent.	L. F in 1 c.c. per cent.	T. C. per cent.
January	...	...	...	...	...	...	50	750	50	450	...	...	50	420	50	320		...	...	...	..	...	...	...
February	100	240	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	100	420	...	...	...	...
March	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
April	...	...	...	...	...	...	...	...	...	...	100	600	...	...	...	...	...	...	...	...	...	...	...	...
May	...	...	...	...	...	...	...	...	100	1200	...	...	...	...	...	...	...	...	...	...	...	...	...	...
June	...	...	...	...	...	...	...	...	...	...	...	...	100	80	..	...	...	...	...	...	...	...	...	...
July	...	...	...	...	*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
August	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
September	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
October	...		...	...	...	...		...	...	...	...	...	...	...	.	...	...	...	...	...	...	...	...	...
November	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
December	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	50	600	...	...	50	2100	...	...

APPENDIX I—TABLE V.

Showing the Bacteriological results of Filter Beds—Lactose Fermenters and average number of colonies per c. c.—(*Contd.*)

Description of samples.	Bed No. XVII.												Test Tap.											
1926.	L. F. in 60 c. c. per cent.	T. C. per cent.	L. F. in 60 c. c. per cent.	T. C. per cent.	L. F. in 20 c. c. per cent.	T. C. per cent	L. F. in 10 c. c. per cent.	T. C. per cent.	L. F. in 5 c. c. per cent.	T, C. per cent.	L. F. in 1 c. c. per cent.	T. C. per cent.	L. F. in 60 c. c. per cent.	T. C. per cent.	L. F. in 60 c. c. per cent.	T. C. per cent.	L. F. in 20 c. c. per cent.	T. C. per cent.	L. F. in 10 c. c. per cent.	T. C. per cent.	L. F. in 5 c. c, per cent.	T. C. per cent.	L. F. in 1 c. c, per cent.	T. C. per cent.
January	...	...	...	...	...	...	...	...	...	...	100	420	20	70	7	100	27	390	6	640	40	650	...	...
February	...	...	...	...	...	...	...	...	100	600	...	...	...	...	...	...	...	...	...	...	50	670	50	660
March	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	100	970	...	...
April	...	...	...	...	...	...	...	...	100	710	...	...	...	...	...	...	...	...	50	940	25	460	25	900
May	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	50	1200	50	950
June	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	67	1280	33	1100
July	...	...	...	...	...	...	...	...	...	...	...	...	33	300	...	...	...	...	...	...	34	80	33	960
August	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10	400	30	670	60	780	...	...
September	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	75	1130	25	1400
October	...	...	...	...	...	...	...	...	...	...	100	850	...	...	...	...	...	...	...	...	100	1010	...	...
November	...	...	...	...	...	...	...	...	...	...	...	...	31	700	...	...	8	640	8	980	30	1140	23	1000
December	...	...	50	380	50	750	...	...	...	...	...	...	...	...	50	1100	...	...	50	940	...	...	...	...

APPENDIX I—TABLE VI.

Chemical Results of Raw, Filtered and Mixed waters in monthly averages expressed in parts per 100,000.

Description of samples.	Raw water.				Bed No. 1.				Bed No. II.				Bed No. III.			
1926.	Free Ammonia.	Albuminoid Ammonia.	Oxygen Absorption.	Nitrate.	Free Ammonia.	Albuminoid Ammonia.	Oxygen Absorption.	Nitrate.	Free Ammonia.	Albuminoid Ammonia.	Oxygen Absorption.	Nitrate.	Free Ammonia.	Albuminoid Ammonia.	Oxygen Absorption.	Nitrate.
January	Trace.	0·041	0·122	...	·003	·015	·163	...	·005	·012	·063	...	·007	·016	·066	...
February	·001	0·042	0·139	...	...	...	...	...	001	021	·065	...	...	...	...	...
March	·001	0·044	0·175	...	·012	·027	·147	...	...	...	...	...	...	...	...	...
April	·003	0·053	0·150	...	...	...	...	...	...	..	...	...	·016	·022	·141	...
May	·003	0·040	0 156	...	007	·020	·126	...	...	...	...	...	...	...	...	...
June	·003	0·046	0·176	...	...	...	...	...	007	·036	·200	...	·006	0·31	·167	...
July	·003	0 044	0·1 7	...	...	...	...	...	...	...	...	...	...	...	...	...
August	·003	0·042	0·186	...	...	...	...	...	·003	·038	·173	...	·007	·018	·162	...
September	·003	0 048	0 195	...	·002	·027	·133	...	013	·029	·151	...	·005	·040	·071	...
October	·001	0·049	0·181	...	·001	034	085	...	...	...	...	...	·017	·022	·242	...
November	·002	0 043	0·142	...	·009	·026	·085	...	000	·046	·161	...	·014	·014	·156	...
December	·003	0·029	0·149	...	·015	·024	121	...	·002	·020	·122	...	...	...	...	...

APPENDIX I—TABLE VI.

Chemical Results of Raw, Filtered and Mixed Waters in monthly averages expressed in parts per 100,000—(*Contd.*)

Description of samples.	Bed No. IV.				Bed No. V.				Bed No. VI.				Bed No. VII.			
1926	Free Ammonia.	Albuminoid Ammonia.	Oxygen Absorption.	Nitrate.	Free Ammonia.	Albuminoid Ammonia.	Oxygen Absorption.	Nitrate.	Free Ammonia.	Albuminoid Ammonia.	Oxygen Absorption.	Nitrate.	Free Ammonia.	Albuminoid Ammonia.	Oxygen Absorption.	Nitrate.
January	·005	·017	·105	...	·007	·016	·052	...	·006	·013	·058	...	·005	·011	·031	...
February	...	...	...	...	...	...	...	...	·009	·020	·120	...	·004	·008	032	...
March	...	...	...	...	...	...	...	...	·013	·020	·168	...	·011	·018	·137	...
April	·012	·028	·068	...	...	...	...	...	...	...	...	...	·014	025	·158	...
May	·016	0·25	·160	...	·009	·018	·158	...	...	...	...	...	...	...	...	...
June	·012	·025	·240	...	...	...	...	...	...	...	...	...	...	...	...	...
July	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
August	·018	·036	·249	...	...	...	...	...	...	...	...	...	...	...	...	...
September	·003	·033	·141	...	...	...	...	...	...	...	...	...	...	...	...	...
October	·015	0·20	·168	...	·012	·017	·094	...	...	...	...	...	...	...	...	...
November	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
December	·018	·029	168	...	·017	·029	·147	...	·012	·016	098	...	·013	·022	·125	...

APPENDIX 1—Table VI.

Chemical Results of Raw, Filtered and Mixed waters in monthly averages expressed in parts per 100,000—(*Contd.*)

Description of samples	Bed No. VIII.				Bed No. IX.				Bed No. X.				Bed No. XI,			
1926.	Free Ammonia.	Albuminoid Ammonia.	Oxygen Absorption.	Nitrate.	Free Ammonia.	Albuminoid Ammonia.	Oxygen Absorption.	Nitrate.	Free Ammonia.	Albuminoid Absorption.	Oxygen Absorption.	Nitrate.	Free Ammonia.	Albuminoid Ammonia.	Oxygen Absorption.	Nitrate.
January	·001	·015	·076	...	·006	·027	·104	...	·005	·012	·086	...	·004	·015	·068	...
February	·006	·017	·103	...	·005	·017	·070	...	...	...	...	...	·006	·018	·080	...
March	·015	·020	·137	...	...	...	...	...	...	...	...	...	...	...	...	...
April	·007	·017	·079	...	·003	·017	·075	...	...	...	...	...	...	...	...	...
May	·006	·029	·120	...	·011	·013	·140	...	...	...	...	...	·008	·025	·120	...
June	...	...	...	...	...	...	...	...	·007	·029	1·40	...	...	...	...	...
July	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
August	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..
September	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
October	...	...	...	...	·015	·018	·141	...	·017	·031	·168	...	...	...	...	...
November	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
December	·009	·012	·096	...	·009	·016	·137	...	·013	·031	·106	...	...	...	...	...

APPENDIX TABLE I—TABLE VI.

Chemical results of Raw, Filtered and Mixed waters in Monthly averages expressed in parts per 1,00,000—(*Contd*).

Description of Samples.	Bed No. XII.				Bed No. XIII.				Bed No. XIV.				Bed No. XV.			
1926.	Free Ammonia.	Albuminoid Ammonia.	Oxygen Absorption.	Nitrate.	Free Ammonia.	Albuminoid Ammonia.	Oxygen Absorption.	Nitrate.	Free Ammonia.	Albuminoid Ammonia.	Oxygen Absorption.	Nitrate.	Free Ammonia.	Albuminoid Ammonia.	Oxygen Absorption.	Nitrate.
January	·005	·011	·133	...					·008	·116	·117	...	·006	·013	·092	...
February	·007	·020	·100	...	Experimental Bed				...	...	...	...	·009	·916	·120	...
March	...	...	...	...	The results are				...	...	...	...	...	...	...	...
April	...	...	...	...	put up separately.				...	...	...	...	·017	·020	·178	...
May	...	...	...	...					...	...	...	...	...	...	...	...
June	...	...	...	...	...	...	...	...	...	...	...	...	·008	·020	·200	...
July	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
August	...	...	...	...	·003	·029	·130	...	...	...	...	...	...	...	...	...
September	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
October	...	...	...	...	·004	·029	·087	...	...	...	...	...	...	...	...	...
November	...	...	...	...	·081	·084	·092	...	...	...	...	...	...	...	...	...
December	·004	·015	·110	...	...	...	...	...	0·016	·029	·156	...	...	...	...	...

APPENDIX I—TABLE VI.

Chemical Results of Raw, Filtered and Mixed Waters in Monthly Averages expressed in parts per 1,00,000.—(*Contd.*)

Description of Samples.	Bed No. XVI.				Bed No. XVII.				Test Tap.			
1926.	Free Ammonia.	Albuminoid Ammonia.	Oxygen Absorption.	Nitrate.	Free Ammonia.	Albuminoid Ammonia.	Oxygen Absorption.	Nitrate.	Free Ammonia.	Albuminoid Ammonia.	Oxygen Absorption.	Nitrate.
January ...	·006	·014	·100	...	·008	·013	·084	...	·004	·012	·056	...
February ..	·012	·010	·140		·010	·015	·150	...	·006	·018	·078	...
March ...	...	...	...	...	...	...	...	...	·010	·031	·158	...
April ...	...	...	...	...	·018	·022	·122	...	·006	·016	·046	...
May ...	...	...	...	...	...	...	...	...	·005	·015	·074	...
June ...	·013	·022	·210	...	...	...	...	...	·010	·030	·149	...
July ...	...	...	...	...	...	...	...	...	·011	·037	·133	...
August ..	...	...	...	...	...	...	...	...	·005	·027	·121	...
September ...	...	...	...	...	...	...	...	...	·004	·026	·125	...
October ...	...	...	...	...	·007	·027	·126	...	·004	·042	·159	...
November ...	...	...	...	...	...	...	...	...	·007	·033	·102	...
December ...	·011	·224	·182	...	·005	·025	·127	...	·012	·031	·157	...

APPENDIX I.

ANALYSIS OF THE MADRAS CITY WATER SUPPLY.

Date, January 1926.

Samples from the Distribution System.

Date of collection.	9-1-26	9-1-26	9-1-26	20-1-26	20-1-26	20-1-26	29-1-26	29-1-26	29-1-26
Source as per label ..	P. F. near Nariengadu Paracheri.	Tap at the backyard of Sir A. P. Patro's Bungalow Egmore.	Inside tap of Mr. Siva Rama Menon's House Hails Road.	P. F. at the junction of Nungambakam village Road with High Road.	P. F. in Macky's Garden Cheri.	P. F. in Gulam Abbas Alikhan 1st Street.	P. F. near Adyar Toll Gate.	P. F. in Mandaveli Street near Brodie P. O.	Inside tap in "Hazelmere" near San Thome P. O.
Total colonies per C. C. on agar at 37° C..	130	120	830	500	600	600	80	120	200
Lactose Fermenters present in how many C. C. and upwards ..	60 cc.	20 cc.	1 cc.	1 cc.	1 cc.	1 cc.	20 cc.	5 cc.	5 cc.
Result of Vibrio test ..	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Colour and Transparency ..	Sy &c *	Sy &c	Sy &c	Sy &c	Sy &c	Sy &c	Sy &c	Sy &c	Sy &c
Smell ..	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Ammoniacal Nitrogen in parts per 100,000 ..	0·0011	trace	trace	0·0023	trace	trace	0·0045	trace	0·0017
Albuminoid Nitrogen in parts per 100,000 ..	0·0146	0·0156	0·0146	0·0146	0·0134	0·0146	0·0146	0·0180	0·0180
Oxygen absorbed (Tidy's) in parts 100,000.	0·0762	0·0762	0·0762	0·0632	0·0632	0·0737	0·0600	0·0600	0·0700
Nitric Nitrogen ..	trace.	trace	trace	trace	trace	trace	Nil	trace	trace
Nitrites ..	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

* Sy. & C. = Slightly yellowish and clear ; C. & C. = Colourless & clear.

APPENDIX I.

ANALYSIS CF THE MADRAS CITY WATER SUPPLY.

Date, February 1926.

Samples from the Distribution system—(Contd.)

Date of collection.	6-2-26.	6-2-26.	6-2-26.	12-2-26.	12-2-26	12-2-26	19-2-26	19 2-26	19 2- 6	25-2 26	25-2 26	25-2-26	25-2-26.
Source as per label.	P. F. in Mukiammam Koil Street Chintadripet 23rd Division.	P. F. in Swami Naicken Street Chintadripet 23rd Division.	P. F. at tram end of Murugappa Chetty Street, Chintadripet 23rd Division.	P. F. in front of No. 257 Mint Street 12th Division.	P. F. in Sundara Mudali Street, (Tap facing East) 12th Division.	P. F. in Mulla Sahib Street, opposite Padma Press 12th Division.	P. F. at the junction of Chandu Sahib lane with the Street, 28th Division.	P. F. in front of $\frac{1}{48}$ Venkatachalla Mudali Street, 28th Division.	P. F. front of Child welfare centre Edward Elliot's Road 28th Division.	P. F. in Dccosta Road at the entrance of lane into the marshy low land.	Scour value near rower mills line in middle of marshy low land.	Inside tap, M. E. S. C. Power Station.	Platform Tap at Basin Bridge Railway Station.
Total colonies per C. C. on agar at 37° C..	800	620	570	1300	1200	1800	480	580	470	600	580	610	540
Lactose Fermenters present in how many C. C. and upwards ..	5 cc.	5 cc.	5 cc.	5 cc.	1 cc.	5 cc.	5 cc.	1 cc.	5 cc.	5 cc.	5 cc.	5 cc.	5 cc.
Result of Vibrio test ..	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Colour and Transparency ..	Sy & c	Sy & c	Sy & c	Sy & c	Sy & c	Sy & c	Sy & c	Sy & c	Sy & c	Sy & c	Sy & c	Sy & c	Sy & c
Smell ..	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Ammoniacal Nitrogen in parts per 100,000 ..	trace	trace	trace	0·0073	0·0224	0·0146	trace	0 0017	0 0045	trace	trace	0·0017	0 0017
Albuminoid Nitrogen in parts per 100,000 ..	0 0156	0 0190	0 0221	0·0236	0 0258	0·0236	0 0180	0·0146	0.0134	0 0156	0 0156	0 0146	0 0131
Oxygen absorbed (Tidy's) in parts 100,000.	0 0800	0·0700	0 0800	0·1000	0·0800	0·1000	0.0585	0·0585	0·0585	0·0930	0·1000	0·0909	0 0511
Nitric Nitrogen ..	Nil	Nil	Nil	trace	trace	trace	Nil	Nil	trace	Nil	trace	Nil	trace
Nitrites ..	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

ANALYSIS OF THE MADRAS CITY WATER SUPPLY.

Date March, 1926.

Samples from the Distribution System—(*contd*).

Date of collection.	5	5	5	26	26	26	30	30	30
Source as per label ..	Tap in No. 20 Mosque Street Chepauk.	P. F. in Coum Lock P. W. D. Chepauk.	P. F. in front of Lascars lines on the Beach.	Tap in No. 8 Landon's Gardens Kilpauk.	P. F. in Haniey's Road near Palm wood Bungalow.	Tap in Yuvathi Sranalaya.	Bottom floor tap "Taylors Garden" Adyar.	Bath Room "Tap Taylors Garden" Adyar Kilpauk.	P. F. in Pakeriah Paracheri 200 yards month of "Taylors Garden."
Total colonies per C. C. on agar at 37° C..	280	260	400	350	400	320	710	800	600
Lactose Fermenters present in how many C. C. and upwards ..	10 cc.	10 cc.	20 cc.	60 cc.	20 cc.	60 cc.	20 cc.	10 cc.	60 cc.
Result of Vibrio test ..	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Colour and Transparency ..	Sy & c.	Sy & c	Sy&c	Sy & c	Sy & c	Sy &c	Y & c	Y & c	c & c
Smell ..	Nil	Nil	Nil	Nil	Nil	Nil	Tar smell	Tar smell	Nil
Ammoniacal Nitrogen in parts per 100,000 ..	trace	0·0011	0·0034	0·0056	0·0022	0·0028	0·0078	trace	trace
Albuminoid Nitrogen in parts per 100,000 ..	0·0200	0·0156	0·0156	0·0302	0·0258	0·0268	0·0180	0·0206	0·0168
Oxygen absorbed (Tidy's) in parts 100,000. 100,000 ..	0·0900	0·0800	0·0800	0·1300	0·1300	0·1100	0·1545	0·1182	0·0818
Nitric Nitrogen ..	trace	trace	Nil	Nil	Nil	Nil	trace	Nil	Nil
Nitrites ..	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

APPENDIX I.

ANALYSIS OF THE MADRAS CITY WATER SUPPLY.

Date, April 1926.

Samples from the Distribution system—(*contd*.)

Date of collection.	30–4–26	30–4–26	30–4–26
Source as per label	P. F. at the Charia kolam Bridge on the Wall Tax Road.	P. F. North side of today shop 22/54 Anna Pillai 3rd lane.	P. F. at the north end of Sundara Mudaly Street.
Total colonies per C. C. on agar at 37° C..	800	900	750
Lactose Fermenters present in how many C. C. and upwards ..	20 cc.	10 cc.	10 cc.
Result of Vibrio test	Nil.	Nil.	Nil.
Colour and Transparency	etc.	etc.	etc.
Smell	Nil.	Nil.	Nil.
Ammoniacal Nitrogen in parts per 100,000 ..	0·0045	Trace.	Trace.
Albuminoid Nitrogen in parts per 100,000 ..	0·0302	0·0314	0·0314
Oxygen absorbed (Tidy's) in parts 100,000	0·1043	0·1130	0·0696
Nitric Nitrogen	Nil.	Trace.	Trace.
Nitrites	Nil.	Nil.	Nil.

APPENDIX I.

ANALYSIS OF THE MADRAS CITY WATER SUPPLY.

Date, ***May*** 1926.

Samples from the Distribution System—(*contd.*)

Date of collection.	6-5-26	6-5-26	15-5-26	15-5-26	8-5-26	8-5-26	6-5-26	8-5-26	15-5-26	15-5 26	22-5-26	15-5-26	15-5-26	22-5-26	22-5-26	22-5-26	22-5-26
Division No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Source as per label.	Rayapuram Railway Stn.	P. F. Opp: Toddy Shop Monegar Choultry Road.	P. F. near Washermenpet Police Station.	P. F. in Elaya Mudali Street near the jn. of Mint Subraya Mudali Street.	P. F. in 1st Line Beach near Depty Police Commissioner's Office.	P. F. in High Court Buildings near entrance to Lawyer's apartments.	P. F. in front of No. 227 Ibramji Sahib Road.	P. F. in front of W. H. Haller & Co.	P. H. opp: Mosque Portuguese Church Street.	P. F. at jn. of Seven Wells Street and Ramalinga Mudali Street.	P. F. in front of No. 26 Govindappa Naick Street.	P. F. near Basin Bridge in Wall Tax Road, gift by B. N. Chandick.	P. F. at entrance Andiappa Naik Street from Wall Tax Road	Tap behind Memorial Hall F. B. S. Bdgs.	P. F. in Trinity Chapel Compound Wall Tax Road.	P. F. in Salt Cottars Railway Station near outward gate.	P. F. Cholay Market Arimuthu Maistry Street
Total colonies per C. C. on agar at 37° C..	1000	1200	380	690	890	1040	900	900	490	410	Countless.	4 0	350	1400	1040	1200	860
Lactose Fermenters present in how many C. C. and upwards ..	20 cc.	10 cc.	5 cc.	5 cc.	10 cc.	5 cc.	20 cc.	5 cc.	5 cc.	1 cc.	1 cc.	10 cc.	20 cc.	1 cc.	1 cc.	5 cc.	5 cc.
Result of Vibrio test ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Colour and Transparency ..	Sy.&c.	Sy.&c.	Sy.&c.	Sy.&c.	Sy.&c	Sy &c.	Sy.&c.	Sy.&c.	Sy &c.	Sy.&c.	Sy.&c.	Sy.&c	Sy.&c.	Sy &c.	Sy.&c.	Sy &c.	Sy.&c.
Smell ..	Nil.	Nil.	Nil	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Ammoniacal Nitrogen in parts per 100,000 ..	Trace.	0·0022	0·0067	0 0059	0·0034	Trace.	0·0084	Trace.	Trace.	0·0134	0.0034	0·0022	0·0059	Trace.	Trace,	0 0059	0.0067
Albuminoid Nitrogen in parts per 100,000 ..	0·0 24	0·0280	0·0292	0·0258	0 0224	0·0236	0·0246	0 0212	0·0246	0·0258	0·0246	0 0236	0 0258	0·0246	0·0236	0·0221	0 0226
Oxygen absorbed (Tidy's) in parts 100,000.	0·1333	0·1222	0 0976	0·1073	0·0842	0·1053	0·1333	0·0947	0 1600	0·1300	0·1081	0·0976	0·0976	0·1190	0·1081	0·1625	0 1128
Nitric Nitrogen ..	Present.	Present.	Nil.	Nil.	Trace.	Trace.	Present.	Trace.	Nil.	Nil.	Trace.	Nil.	Nil.	Trace.	Trace	Trace.	Nil.
Nitrites ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil	Nil	Nil.	Nil	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.

APPENDIX I.

ANALYSIS OF THE MADRAS CITY WATER SUPPLY.

Date May, 1926.

Samples from the Distribution System—(*Contd.*)

Date of collection.	22-5-26.	23 5-26.	26-5-26.	26 5-26.	26-5-26.	26-5-26.	26-5-26.	26-5-26.	28-5-26.	28-5-26.	28-5-26.	28 5-26.	28-5-26.
Division No.	18	19	20	21	22	23	24	25	26	27	28	29	30
Source as per label.	Inside tap No. 7 Valluvan Street.	Tap in S. I. A. A.	Tap inside Willingdon for a way from Tennis Court.	P. F. near Kilpauk Toll Gate.	Tap near Motor Shed in Revd. E. Meston's Bungalow.	P. F. in Venkatesa Gramani Street near its Jn. with Arunachala Naick Street.	P.F. in Christ cross Church Compound.	Inside tap in Mr. Paxton's Quarters House.	Tap in Ganga Bavan Restaurant Veera Raghava Mudali Street.	Tap in St. George Cathedral.	Tap in San Thome R. C. Church Compound.	Tap in 1/18 Peters Road.	Tap near Rifle Butts, San Thome.
Total colonies per C. C. on agar at 37° C..	1100	1300	700	1100	980	1000	1400	1200	900	1200	850	900	890
Lactose Fermenters present in how many C. C. and upwards ..	1 cc.	1 cc.	60 cc.	20 cc	20 cc.	20 cc.	10 cc.	10 cc.	5 cc.	1 cc.	5 cc.	5 cc.	5 cc.
Result of Vibrio test ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil	Nil.	Nil.	Nil	Nil.	Nil.	Nil.	Nil.
Colour and Transparency ..	Sy. & C	Sy. & C	Sy & C.	Sy. & C.	Sy. & C	Sy. & C.	Sy. & C.	Sy. & C.	Sy. & C	Sy. & C.	Sy. & C.	Sy & C.	Sy. & C.
Smell ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Ammoniacal Nitrogen in parts per 100,000 ..	0·0124	0·0062	0·0039	0·0067	0 0090	trace.	trace.	0 0064	0·0028	0·0022	trace.	0·0017	0·0039
Albuminoid Nitrogen in parts per 100,000 ..	0·0236	0 0258	0·0190	0·0268	0·0200	0·0206	0·0200	0 0180	0 0190	0·0314	0·0212	0·0246	0·0268
Oxygen absorbed (Tidy's) in parts 100,000.	0·1333	0·1270	0·1200	0·1200	0·1100	0·1100	0·1200	0·1200	0·0900	0·1333	0·1143	0·1238	0·1171
Nitric Nitrogen ..	Nil.	Nil.	trace.	trace.	Nil.	Nil.	trace.	Nil.	trace.	trace.	trace.	trace.	trace.
Nitrites ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.

APPENDIX I.

ANALYSIS OF THE MADRAS CITY WATER SUPPLY.

Date June 1926.

Samples from the Distribution System—(*Contd.*)

Date of collection.	3	3	3	3	3	3	11	11	11	11	11	11	16	16	16
Division No. ...	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV
Source as per lable.	P. F. at the junction of South and East Mada Church Road.	P. F. in Flag Staff St. close to Vaccine Depot.	P. F. in Corporation Model School in Cemetery Rd.	P. F. in Basin Bridge Rd. adjoining Abkari General Stores.	P. F. on Beach Ry. Station Platform opp. G. P. O.	P. F. close to Motor Garage High Court Compound.	P. F. at the Errappen Chetty St. with Armenian Street.	Tap in No. 19 Badrian St.	P. F. at the entrance of Pedariar Pogoda Street with old Jail Street.	Tap in No. 36 Perianna Mudali Street.	Tap in $\frac{2}{3}$ Narayana Mudali Street.	Tap in No. 289 Mint St.	P. F. in Perumal Koil Garden St. 4th Lane.	P. F. in Medical College near the Laboratory.	P. F. in Bungarammal St. Park Town.
Total colonies per C. C. on agar at 37° C..	1000	1900	2400	2800	1800	2000	1000	780	1080	800	760	1280	760	780	1000
Lactose Fermenters present in how many C. C. and upwards ..	20 cc.	5 cc.	5 cc.	5 cc.	60 cc.	1 cc.	5 cc.	5 cc.	1 cc.	5 cc.	5 cc.	5 cc.	5 cc.	5 cc.	5 cc.
Result of Vibrio test ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Colour and Transparency ..	C. & c.	Sy.&c.	Sy.&c.	Sy.&c.	C. & c.	C. & c.	Sy.&c.	Sy.&c.	Sy.&c.	Sy.&c.	Sy.&c.	Sy.&c.	Sy.&c.	C. & c.	Sy.&c.
Smell ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil	Nil.	Nil.
Ammoniacal Nitrogen in parts per 100,000 ..	0·0045	0·0022	0·0028	0·0039	Trace.	Trace.	Trace.	0·0028	0·0045	0·0022	0·0028	0·0056	0·0028	Trace.	·0067
Albuminoid Nitrogen in parts per 100,000 ..	0·0224	0·0200	0·0212	0·0212	0·0156	0·0200	0·0224	0·0246	0·8268	0·0258	0·0200	0·0292	0·0292	0·0280	0·0302
Oxygen absorbed (Tidy's) in parts 100,000.	0·1500	0·1273	0·1455	0·1273	0·1417	0·1250	0·1222	0·1333	0·1231	0·1231	0·1222	0·1128	0·1333	0·1222	0·1333
Nitric Nitrogen ..	0·0500	0·0200	0·0500	0·0200	0·0500	0·0500	0·0300	0·0200	Trace.	Trace.	0·0200	Nil.	Trace.	0·0300	0·0200
Nitrites ...	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.

APPENDIX I.

ANALYSIS OF THE MADRAS CITY WATER SUPPLY.

Date June 1926.

Samples from the Distubution System.—(*Contd.*)

Date of collection.	16	16	16	23	23	23	23	23	23	30	30	30	30	30	30
Division No.	XVI	XVII	XVIII	XIX	XX	XXI	XXII	XXIII	XXIV	XXV	XXVI	XXVII	XXVIII	XXIX	XXX
Source as per label.	P. F. in Demellow's Road in front of W.W. Overseer's Office.	P.F. in Corporation Model School in Vathiar Kanda Pillai Street.	P F. front of No. 32 Arasappa Mudali Street.	P.F. in S. I. A. A. near Tennis Courts.	Tap inside School of Arts near the office.	Tap opp : Main Bridge in Foreign Women Society office, Riherdon Road.	Tap in D. P. Is'. Office compound near Madras Dt., E O. Office.	P. F. in Cooum River Rd. close to the entrance of Sami Pandaram Street.	Tap near Umada Bugh Hostel.	P. F. in Board office Bags. opp : M. C. C. Gate.	P. F Adj. No. 17 Hanumantha Lala Lane.	P. F. Adj. Temple in Sannadhi Street.	P. F. at the backyard of Deaf & Dumb School,	P. F. opp. to Bishops Bungalow, Madras.	Tap near Adyar Toll Gate.
Total colonies per C. C. on agar at 37° C..	723	600	1180	900	800	700	510	1200	640	860	720	620	900	980	640
Lactose Fermenters present in how many C. C. and upwards ..	5 cc.	5 cc.	1 cc.	5 cc.	5 cc.	5 cc	20 cc.	5c c.	10 cc.	5 cc.	5 cc.	5 cc.	5 cc.	5 cc	5 cc.
Result of Vibrio test ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Colour and Transparency ..	Sy & c.	Sy. & c.	Sy.&c.	Sy.&c.	Sy.&c.	Sy.&c.	Sy &c.	Sy.&c.	Sy.&c.	Sy.&c.	Sy.&c.	Sy.&c.	Sy.&c.	Sy. &c.	Sy.&c.
Smell ..	Nil.	Nil.	Nil.	Nil	Nil.	Nil.	Nil.	Nil.	Nil.	Nil	Nil.	Nil	Nil.	Nil	Nil.
Ammoniacal Nitrogen in parts per 100,000 ..	0·0067	0·0078	0·0056	0 0 62	Trace.	Trace.	0·0067	0·0062	0·0028	0·0022	Trace.	0·0056	Trace.	0·0056	0·0056
Albuminoid Nitrogen in parts per 100,000 ..	0·0280	0·0292	0·0268	0·0258	0·0246	0·0264	0·0258	0·0268	0·0246	0·0236	0·0246	0·0258	0·0246	0·0258	0·0280
Oxygen absorbed (Tidy's) in parts 100,000.	0·1333	0·1222	0·1222	0·0952	0·0762	0·1000	0·0800	0·1143	0·1000	0·0889	0·1000	0·1111	0·0889	0·0778	0·1222
Nitric Nitrogen ..	Trace.	Nil.	Trace.	Nil.	Trace.	Trace.	Nil.	Nil.	Trace.	Trace.	Trace.	Trace.	Trace.	Trace.	Trace.
Nitrites ..	Nil.	,,	Nil.	,,	Nil.	Nil.	,,	,,	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.

APPENDIX I.

ANALYSIS OF THE MADRAS CITY WATER SUPPLY.

Date *July* 1926.

Samples from the Distribution System—(*Contd*).

Date of collection.	6-7-27.	6-7-26.	6-7-26.	6-7-26.	6-7-26.	6-7-26.	20-7-26.	20-7-26.	20-7-26.	20-7-26.	20-7-26.	20-7-26.
Division No.	1	2	3	4	5	5	7	8	9	10	11	12
Source as per label.	P. F. Ammen Koil Street.	P. F. in Grace Gardens Kalmandapam Road.	P. F. adjoining No. 38 Sivarangammal Street.	Last P. F. in Sheni Ammen Koil Street.	Tap in No. 25, Modern House 2nd Line Beach.	Tapinside No. 265, Thambu Chetty Street.	Tap near Kitchen in Prince Hotel Jone's St.	P. F. adjoining No. 33, Guruppa Mudali Street.	Tap in No. 120, Thiappa Mudali Street.	Tap inside No. 27 Veeraswami Pillai Street.	P. F. opp. to American Press in Perumal Mudali Street.	P. F. at the junction of Saravana Mudali Street with Bashiakara Naidu Street.
Total colonies per C. C. on agar at 37° C..	1140	1300	1100	1150	820	2000	680	700	1700	1200	540	690
Lactose Fermenters present in how many C. C. and upwards ..	5 cc.	5 cc.	5 cc.	5 cc	5 cc	1 cc.	10 cc.	10 cc.	1 cc.	5 cc.	10 cc.	10 cc.
Result of Vibrio test ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Present.	Present.	Present.	Present.	Present.	Present.
Colour and Transparency ..	Sy. & C.	Sy. & C.	C. & C.	C. & C.	Sy. & C.	C. & C.	C. & C.	C. & C.	C. & C	C. & C	C. & C.	C. & C.
Smell ..	Nil.	Nil.	Nil.	Nil	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Ammoniacal Nitrogen in parts per 100,000 ..	0·0022	0·0028	Trace.	0·0056	0·0039	0·0017	0·0022	Trace.	0·0028	0·0022	Trace.	0·0056
Albuminoid Nitrogen in parts per 100,000 ..	0·0184	0·0190	0·0190	0·0212	0·0196	0·0184	·00146	0·0268	0 0146	0·0258	0 0224	0 0156
Oxygen absorbed (Tidy's) in parts 100,000.	0·1081	0·0973	0·1053	0·1158	0·0324	0·1053	0·1200	0·1300	0·1200	0·1100	0 1200	0.1200
Nitric Nitrogen ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Nitrites ..	Nil.	Nil,	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.

APPENDIX I.

ANALYSIS OF THE MADRAS CITY WATER SUPPLY.

Date, August 1926.

Samples from the Distributary system—(*contd*).

Date of collection.	5-8-26	5-8-26	5-8-26	5-8-26
Source as per label ..	Tap in No. 13 Ramasami Street Mannady.	Tap near pavillion M. U. C.	Tap in No. 27 Pillayar Koil Street.	Bathing fountain at the junction of Anna Pillai St. with Wall Tax Road.
Total colonies per C. C. on agar at 37° C..	2850	1520	800	1000
Lactose Fermenters present in how many C. C. and upwards ..	5 cc.	5 cc.	10 cc.	5 cc.
Result of Vibrio test ..	Present.	Present	Absent	Present
Colour and Transparency ..	Sy& C	Sy & C	Sy & C	Sy & C
Smell ..	Nil.	Nil.	Nil.	Nil.
Ammoniacal Nitrogen in parts per 100,000 ..	Trace	Trace	Trace	Trace
Albuminoid Nitrogen in parts per 100,000 ..	0·0212	0·0200	0·0180	0·0224
Oxygen absorbed (Tidy's) in parts 100,000.	0·1081	0·1189	0·1405	0·1405
Nitric Nitrogen ..	Nil.	Nil.	Nil.	Nil.
Nitrites ..	Nil.	Nil.	Nil.	Nil.

APPENDIX I.

ANALYSIS OF THE MADRAS CITY WATER SUPPLY.

Date, September 1926.

Samples from the Distribution system—(Contd.)

Date of collection.	29-9-26	29-9-26	29-9-26	29-9-26	29-9-26	29-9-26	29-9-26	24-9-26	24-9-26	24-9-26	24-9-26	24-9-26	24-9-26	24-9-26	22-9-26	22-9-26	22-9-26
Division No.	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XVI	XVI	XVII
Source as per label.	Royapuram Railway Station tap.	P. F. at the Junction of Rama Naick Street and Cemetery Street.	Tap inside marker's room in Royapuam Medical School Hotel.	P. F. near Salt and Abkari Office in Basin Bridge Road.	Tap in-side 109, Angappa Naick Street.	P.F. opposite 120, Thambu Chetty Street.	Tap in side 56, Armenian Street.	Tap in side 17, Anderson Street.	P. F. opposite to mosque in Portugese Church St.	P. F. in Barracks Street, close to Perianna Mudali Street.	Tap inside 2/103, Perumal Mudali Street.	P. F. in Peddu Naieken Street, opp. to the Cromton Eng. Co. wrok Shop.	P. F. at the junction of Amman Koil Street, and Sundra Mudali Street.	P. F. in Devaraja Mudali Street, adjoining Subramaniam Alley.	Tap in-side. Delhi Arya-Bavan Restaurant.	Tap in side Van. Vilas Coffee Hotel in De-Melows Road.	Tap near Park in Avadanam Papier Street.
Total colonies per C. C. on agar at 37° C..	400	480	410	600	710	900	800	600	1250	1200	1100	700	900	1300	900	1500	1250
Lactose Fermenters present in how many C. C. and upwards ..	60 cc.	60 cc.	5 cc.	5 cc.	5 cc.	5 cc.	5 cc.	5 cc.	1 cc.	1 cc.	1 cc	5 cc.	5 cc.	1 cc	5 cc.	1 cc.	1 cc.
Result of Vibrio test ..	present	present	present	present	present	present	present	present	present	present	present	present	present	present	present	present	present
Colour and Transparency ..	Y & H	Y & H	Y & H	Y & H	Y & H	Y & H	Y & H	Y & H	Y & H	Y & H	Y & H	Y H	Sy & C	Y & C	Y & H	Y & H	Y & H
Smell ..	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Albuminoid Nitrogen in parts per 100,000 ..	0·0028	0·0146	0·0039	0·0045	trace	0·0028	0·0022	0·0022	0·0028	0·0028	0·0146	0·0039	0·0034	0·0028	0·0962	5·0039	0·0034
Albuminoid Nitrogen in parts per 100,000 ..	0·0336	0·0336	0·0358	0·0180	0·0168	0·0190	0·0124	0·0312	0·0360	0·0380	0·0300	0·0400	0·0312	0·0292	0·0360	2·0292	0·0448
Oxygen absorbed (Tidy's) in parts 100,000.	0·0666	0·0778	0·1111	0·1268	0·1111	0·1222	0·1000	0·1222	0·1333	0·1111	0·1059	0·1200	0·1000	0·1176	0·1000	0·1400	0·1100
Nitric Nitrogen ..	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Nitrites ..	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

Y. & H. = Yellowish and hazy.

APPENDIX I.

ANALYSIS OF THE MADRAS CITY WATER SUPPLY.

Date, *September* 1926.

Samples from the Distribution System.—(*contd.*)

Date of collection.	22-9-26	22-9-26	22-9-25	22-9-26	15-9-26	15-9-26	15-9-26	8-9-26	8-9-26	15-9-26	8-9-26	15-9-26	15-9-26
Division No.	XVIII	XIX	XX	XXI	XXII	XXIII	XXIV	XXV	XXVI	XXVII	XXVIII	XIX	XXX
Source as per label.	Tap near Garage in Myrtle Cottage, Kandapa Mudali Street.	Tap at the bottom of the stair case in Doveton Girls' School.	Tap inside Hotel Mercantile, Egmore.	Tap inside Wesleyan Methodist Church Compound.	P. F. at the Jn. of Peter's Road & Mount Road.	Tap inside Chintadripet Police Station at the entrance from Lafond St.	Tap inside Mount Road P. & T. Office close to the gate from Harris Bridge.	Tap inside one of the quarters of the Govt. clerks behind Mr. Conran Smith's bungalow.	P. F. at the Jn. of Sunkuvar St. with Arimuthu Achari Street.	P. F. at the Jn of Pycrofts Rd. & Chella Pillar Koil Street.	Tap between 2 Smallpox wards in K. I. H.	P. F. in St. George Cathedral Rd. opp. to "The Cloisters".	P. F. near Adyar Toll-Gate.
Total colonies per C. C. on agar at 37° C. ..	1100	1200	510	600	480	840	1020	600	620	1400	940	2000	760
Lactose Fermenters present in how many C. C. and upwards ..	1 cc.	1 cc.	5 cc.	5 cc.	5 cc.	5 cc.	5 cc.	20 cc.	60 cc.	5 cc.	10 cc.	1 cc.	5 cc.
Result of Vibrio test ..	Present.	Present.	Present.	Present.	Present.	Present.	Present.	Absent.	Absent.	Present.	Absent.	Present.	Present.
Colour and Transparency ..	Y. & H.	Y. & C.	Sy. & C.	Sy. & C.	Sy. & C.	C. & C.	C. & C.	Sy. & C.	Sy. & C.	Y. & C.	y. & C.	C. & C.	C. & C.
Smell ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Ammoniacal Nitrogen in parts per 100,000 ..	0·0022	0·0034	0·0039	0·0045	Trace.	0·0011	Trace.	0·0084	Trace.	0·0034	0·0045	0·0045	0·0022
Albuminoid Nitrogen in parts per 100,000 ..	0·0336	0·0336	0·0292	0·0292	0·0400	0·0268	0·0300	0·0300	0·0472	0·0312	0·0400	0·0312	0·0360
Oxygen absorbed (Tidy's) in parts 100,000.	0·1000	0·1200	0·1000	0·1100	0·1368	0·1053	0·0947	0·1000	0·1400	0·1318	0·1000	0·1368	0·1263
Nitric Nitrogen ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Nitrites ..	"	"	"	"	"	"	"	"	"	"	"	"	"

APPENDIX I.

ANALYSIS OF THE MADRAS CITY WATER SUPPLY.

Date, *October* 1926.

Samples from the Distribution System—(*con'd*).

Date of Collection.	8	8	8	8	8	8	12	12	12
Source as per label.	Tap near Tennis Court Ordnance Club 14th Division.	Tap inside No. 315 Wall Tax Road 15th Division.	P. F. at the entrance of Tirupalli Street from Wall Tax Road 13th Division.	Tap inside No. 156 P. V. Reddy Oil Mills, Wall Tax Road 12th Division.	P. F. at end of Periapalayam Amman Koil Street 4th Dn.	P. F. in 1st Platform Basin Bridge Railway Station 16th Division.	Tap in 5-A, Marshals Road, 20th Division.	Tap near N. W. gate Connemera Hotel 22nd Division.	Garden tap in Lady Willingdon Nursing Home 24th Division.
Total colonies per C. C. on agar at 37° C.	Countless	1010	Countless	800	810	1100	800	900	900
Lactose Fermenters present in how many C.C. and upwards ...	5 cc.	5 cc	1 cc.	10 cc.	5 cc.	5 cc.	10 cc.	5 cc.	5 cc.
Result of Vibrio test	present	present	present	present	present	presen	present	present	present
Colour and Transparency ...	Y & H	Y & H	Y & H	Y & H	Y & H	Y & H	Y & H	Y & H	Y & H
Smell	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Ammoniacal Nitrogen in parts per 100,000.	0·0039	0·0034	0·0045	0·0039	0·0056	0·0028	0·0045	0·0034	0·0056
Albuminoid Nitrogen in parts per 100,000	0·0148	0·0100	0·0424	0·0396	0·0336	0·0312	0·0404	0·0380	0·0292
Oxygen absorbed (Tidy's in parts 100,000	0·1200	0·1000	0·1600	0·1400	0·1200	0·1000	0·1052	0·1474	0·1263
Nitric Nitrogen	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Nitrites	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.

Date of Collection.	12	12	12	21	21	21	21	21	21
Source as per label.	Tap on the back yard in No. 99 Wallajah Road 25th Division.	P. F. in Sami Naicken St. opp: Dr. N S Subramaniam's house near Tram turning 23rd Dn.	P. F. in Salai Street near its junction with Maddox Street 19th Division.	Tap in No. 211 Jani Jani Khan Bahadur Street 27th Division.	Tap inside 306 Triplicane High Road.	Tap inside in 1/72 D Barbers Bridge Road, 28th Division.	P. F. in North Mada street opp: to Chengalaneer Pillayar Koil Street 30th Division.	P. F. at the junction of Mowbray's Road with Luz Church Road 29th Division.	P. F. near Kilpauk Toll bar 21st Division.
Total colonies per C. C. on agar at 37° C.	950	600	1000	800	940	560	460	580	600
Lactose Fermenters present in how many C.C. and upwards ...	5 cc.	20 cc.	5 cc.	–60 cc.	5 cc.	10 cc.	–60 cc.	60 cc.	–60 cc.
Result of Vibrio test	present	present	present	present	present	present	present	present	absent
Colour and Transparency ...	Y & H	Y & H	Y & H	Y & H	Y & H	Y & H	Y & H	Y & H	Y & H
Smell	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Ammoniacal Nitrogen in parts per 100,000.	0·0039	0·0062	0·0034	Trace	0·0022	0·0045	0·0028	0·0039	0·0067
Albuminoid Nitrogen in parts per 100,000	0·0336	0·0358	0·0380	0·0400	0·0424	0·0492	0·0472	0.0400	0·0412
Oxygen absorbed (Tidy's in parts 100,000	0·1263	0·1474	0·1789	0·1371	0·1371	0·1486	0·1282	0·1412	0·1294
Nitric Nitrogen	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Nitrites	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.

APPENDIX I.

ANALYSIS OF THE MADRAS CITY WATER SUPPLY.

Date November 1926.

Samples from the Distribution System—(*Contd*)

Date of collection.	3	3	3	6	6	6	8	8	8	12	12	12	15	15	15	19	19
Source as per lable.	Garden tap in No. 13 Rundalls Rd. Dn. 19.	Tap in No. 26 Murugappa Mudali St. Dn. 18.	P. F. near Kilpauk Tollbar Dn. 21.	Inside tap in No. 1/78 Avadanam Papier Road Dn. 17.	P. F. in DeMellows Road near Guzarati Mills Dn. 16.	Inside tap in No. 25 General Muthiah Mudali St. Dn. 13.	Garden tap in No. 11 Kennet Lane, Egmore, Dn. 20.	Inside tap in No. 12 Arunachala Naick St. Chintadripet Dn. 23.	Inside tap in No. 4 Nallathambi Chetty St. Mount Road Dn. 25.	Tap near the north-western gate, Connemera Hotel, Dn. 22.	Tap inside 266 Pycrofts Road Dn. 27.	Inside tap in No. 28 Bangaru NaickenSt. at its jn. of Subbaraya Mudaly St. Dn. 24.	P. F. near No. 998 Wall Tax Road Dn. 15.	P. F. at the jn. of Irusappa Maistry St. with Rasappa Chetty St. Dn. 14.	Inside tap in No. 9 Ullandi Street Dn. 8.	P. F. in front of No. 125 Mint Street Dn. 11.	P. F. in front of No. 256 (Residence of mid-wife Patamal Mint St. Dn. 12.
Total colonies per C. C. on agar at 37° C..	700	800	910	800	940	1040	740	690	800	600	800	700	410	600	540	Countless	900
Lactose Fermenters present in how many C. C. and upwards ..	10 cc.	5 cc.	10 cc.	5 cc.	5 cc.	1 cc.	20 cc.	60 cc.	5 cc.	60 cc.	10 cc.	60 cc.	60 cc.	5 cc.	10 cc.	1 cc.	1 cc.
Result of Vibrio test ..	present	present	present	present	present	present	present	present	present	present	present	present	present	present	present	present	present
Colour and Transparency ..	Sy.&C.	Sy.&C.	Sy.&C.	Sy.&H	Sy.&H	Sy.&H	Whitish & slightly hazy	Whitish & slightly hazy	Whitish &slightly hazy	Y.&H.	Y. & H.	Y.&H.	C. & C.	Brownish	C. & C	C. & C.	C. & C.
Smell ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Ammoniacal Nitrogen in parts per 100,000 ..	0·0050	0·0062	0·0045	0·0017	Trace.	0·0039	0·0034	0·0045	0·0131	0·0028	0·0011	Trace.	Trace.	Trace.	0·0028	0·0017	0·0017
Albuminoid Nitrogen in parts per 100,000 ..	0·0268	0·0312	0·0400	0·0200	0·0224	0·0180	0·0248	0·0224	0·0318	0·0312	0·0292	0·0336	0·0360	0·0292	0·0400	0·0299	0·0268
Oxygen absorbed (Tidy's) in parts 100,000.	0·1095	0·1182	0·1095	0·1130	0·1130	0·1230	0·1200	0·1200	0·1000	0·1000	0·1000	0·0900	0·1000	0·1053	0·1083	0·0789	0·0700
Nitric Nitrogen ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Nitrites ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.

APPENDIX I.

ANALYSIS OF THE MADRAS CITY WATER SUPPLY.

Date, December 1926.

Samples from the Distribution System—(*contd.*)

Date of collection.	9	9	9	9	9	9	22	22	22	22	22	22
Source as per label.	Tap inside No. 5 Stringers Street 15th Dn.	Tap in No. 9 Naineappa Naicken Street 14th Dn.	Tap in Narayana Mudali Street 11th Dn.	Inside tap in the house of mide-wife T. Pattammal 257 Mint St 12th Dn.	P. F. at the junction of Seven Wells Street with Ramalinga Mudaly Street 10th Dn.	Inside tap in No. 37 Pedariar Koil Street 9th Division.	Housetap in bath room No. 5 Mada Church South Street Rayapuram 1st Division.	Tap in front of Superintendent's Quarters Robinson Park, 2nd Division.	P. F. at the junction of Slaughter House Road with Monegar Choultry Road 3rd Division.	P. F. opposite No. 9 Pensioner Line Street Washermenpet 4th Dn.	Tap inside No. 162 Broadway opposite Loane Square, 8th Dn.	Tap in No. 25 General Muthiah Mudali Street 13th Division.
Total colonies per C. C. on agar at 37° C....	160	200	130	400	280	700	1500	1200	1000	900	1000	1100
Lactose Fermenters present in how many C. C. and upwards...	10 cc.	10 cc.	20 cc.	20 cc.	20 cc.	5 cc.	1 cc.	5 cc.	1 cc.	5 cc.	5 cc.	5 cc.
Result of Vibrio test	...	...	...	...	...	...	...	...	...	...	...	...
Colour and Transparency	C & C	C & C	C & C	C & C	C & C	C & C	SY.&SH.	SY.&SH.	SY.&SH	C & C	C & C	C & C
Smell	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Ammoniacal Nitrogen in parts per 100,000...	0·0034	0·0067	0·0039	0·0028	0·0045	0·0031	0·0073	Trace.	0·0062	0·0028	Trace.	0·0039
Albuminoid Nitrogen in parts per 100,000...	0·0136	0·0224	0·0200	0·0146	0·0190	0·0134	0·0224	0·0258	0·0516	0·0200	0·0224	0·0280
Oxygen absorbed (Tidy's) in parts 100,000	0·0917	0·0917	0.1000	0·1058	0·1058	0·1176	0·1043	0·1043	0·1130	0·0956	0·1043	0·1130
Nitric Nitrogen	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Nitrites	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.

C. & C. = Colomless & clear; S. Y. & S. H. - Slightly yellowish & slightly hazz.

Statement of the Working of Bed No. 13 with Bacteriological and Chemical results from its Commencement on 3 2-1926.

Date.	Started on.	Stopped on.	Total No. of days worked.	Total quantity of water passed in million gallons.	Opacity.			Bacteriological results.						Chemical results parts per 1,00,000.								
								Raw water.		Coke bed.		Sand bed.		Raw water.			Coke bed.			Sand bed.		
					Filter water.	Coke water.	Raw water.	L. F.	Total counts.	L. F.	Total counts.	L. F.	Total counts.	Amm Nitrogen.	Albd Nitrogen.	Oxy Absorbed.	Amm Nitrogen.	Albd Nitrogen.	Oxy Absorbed.	Amm Nitrogen.	Albd Nitrogen.	Oxy Absorbed
									1st	*Run*												
								cc.		cc.		cc.										
6-2-26	3-2-26	23-2-26	20	22·98	..	...	...	5	940	5	800	5	740	...	...	...	...	...	...	...	...	...
8-2-26	...	...	...	...	17	23	23	10	940	5	1100	5	840	trace	0·0380	0·1263	trace	0·0336	·01263	trace	0·0280	0·1053
9-2-26	...	...	...	...	16	22	23	5	680	5	480	5	210	trace	0 0448	0·1368	0·0006	0·0336	·01053	trace	0·0268	0·0947
10-2-26	...	...	...	...	17	22	24	5	780	5	510	5	270	0·0034	0·0472	0·1400	0·0017	0·0380	0·1400	trace	0·0312	0·1000
12-2-26	...	...	...	...	11·5	19	26	5	2000	5	760	5	640					Nil.				
13-2-26	...	...	...	...	11·5	19	24	5	1 00	5	800	10	380	0·0022	0·0492	0·1500	0·0056	0·0360	0·1400	0·0090	0·0400	0·1000
15-2-26	...	...	...	...	12	20	24	5	1400	5	800	5	640	trace	0·0472	0·1[illegible]00	0·0034	0·0360	0·1100	0·0112	0·0268	0·0900
16-2-26	...	..	...	...	12	19	24	5	960	10	530	10	420	·0022	0·0560	0·1210	0·0068	0·0628	0·0837	0·0124	0·0110	0·0744
17-2-26	...	...	...	...	11 5	20	24	5	800	20	420	20	240	0028	0·0336	0·1333	trace	0·0360	0·1333	0·0067	0·0180	0·0952
18-2-26	...	...	...	...	11·5	20	24	1	1500	10	430	20	220	·0011	0·0400	0·1641	trace	0·0312	0·1436	0·0090	9·0136	0·0923
19-2-26	...	...	...	...	11	20	23	5	300	5	220	60	200					Nil.				
20-2-26	...	...	...	...	10	20	24	10	250	0	210	20	50	·0017	·0336	·1472	0·0022	0·0312	0·1368	0·0050	0·0136	0·0947
22-2-26	...	...	...	...	8	19	23	5	500	5	370	60	70	trace	·0424	·1400	0·0222	0·0360	0·1300	0·0168	0.0200	0·0500
									2nd	*Run.*												
1-3-26	25-2-26	16-3-26	19	24·25	9	18	24	5	740	5	520	5	410	·0034	·0312	·1581	·0011	·0268	·1488	·0017	·0200	0·0116
2-3-26	...	...	...	...	8·5	17	22	5	1040	10	870	20	150	·0011	·0292	·1[illegible]68	·0017	·0248	·0737	·0039	·0180	0·0737
3-3-26	...	...	...	...	8·5	17	22	5	900	5	600	20	170	0039	·0536	·1684	trace	·02[illegible]2	·1050	·0045	·02[illegible]0	0·1053
4-3-26	...	...	...	...	8·5	16	23	5	840	10	450	60	120	·0006	0536	·1600	·0011	·0400	·1400	·0017	·0248	0·1000
5-3-26	...	...	...	...	8·0	17	23	5	1200	5	950	60	180					Nil.				
6-3-26	...	...	...	...	8	17	22	5	1400	5	800	60	130	·0017	·0516	·1500	·0011	·0380	·1400	·0011	·0224	0·1100
8-3-26	...	...	...	...	8	17	22	5	1300	5	1100	-60	100	0011	·0424	·1700	trace	·0312	·1400	·0056	·0180	0·1100

L. F. = { Lactose Fermenters present in how many c.c. and upwards?

Total counts = { Total colonies per c.c. on agar at 37·c.

Results of Expl. Bed 13.—(*contd*).

Date.	Started on.	Stopped on.	Total No. of days worked.	Total quantity of water passed in million gallons.	Opacity.			Bacteriological results.						Chemical results—parts per 100,000.								
								Raw water.		Coke bed.		Sand bed.		Raw water.			Coke Bed.			Sand Bed.		
					Filter water.	Cold water.	Raw water.	L. F.	Total Counts.	L. F.	Total Counts.	L. F.	Total Counts.	Amm Nitrogen.	Albd Nitrogen.	Oxy Absorbed.	Amm Nitrogen.	Albd-Nitrogen.	Oxy Absorbed.	Amm Nitrogen.	Albd Nitrogen.	Oxy Absorbed.
9-32-6					7·5	17	22	1	900	5	720	—60	80	Trace.	·0448	·1756	Trace.	·0360	·1463	·0034	·0200	.1073
10-3-26					7·5	16	21	5	1500	5	1300	—60	80	Trace.	·0472	·1524	·0011	·0350	·1333	·0028	·0248	0952
11-3-26					7·5	16	20	5	1100	5	980	—60	100	·0011	·0448	·1790	·0022	0336	·1681	·0039	·0126	·1263
12-3-26					8	17	22	5	1000	5	700	—60	50	·0007	·0516	1838	Trace.	·0400	·1622	·0068	0180	·1081
13-3-26					8	17	22	5	1040	5	640	—60	70	Trace.	·0380	·1684	Trace.	·0268	·1474	·0068	0224	-1033
16-3-26					8	17	23	5	800	10	240	—60	50	·0022	·0400	·1744	·0017	.0380	·1641	·0017	·0224	·1128
	18-3-26	2-4-26	15	21-2-5							3rd	Run.										
19-3-26					10	19	25	5	1200	5	800	5	700	·0011	·0400	·1579	Trace.	·0360	·1474	·0134	·0180	·1053
20-3-26					9·5	19	24	5	1000	10	750	20	600	Trace.	·0400	·2300	·0017	·0292	·1600	·0022	·0156	·1300
22-3-26					10	19	25	1	1500	10	700	60	400	·0022	·0400	·1744	0 22	·0336	·1641	·0017	·0180	·1231
23-3-26					10	18·5	24	5	1300	5	1000	20	470	·0011	·0448	·1789	Trace.	·0360	·1474	·0017	·0224	·0947
24-3-26					10	18	24	1	1500	5	620	60	40	Trace.	·0192	·1700	Trace.	·0448	·1400	·0017	·0268	·1000
25-3-26					10	18	23	10	800	20	500	—60	300	·0017	.0172	·1778	·0011	·0380	·1667	·0073	·0268	·1222
26-3-26					10	18	23	20	750	60	430	—60	300	...	...	Nil	...	...	...	...	...	...
29-3-26					9·5	17	23	10	1060	20	700	—60	270	·0050	·0360	·1860	·0039	·0336	·1767	·0124	·0268	·1489
30-3-26					9·5	17	23	10	900	20	620	—60	200	...	...	Nil	...	...	...	...	...	...
31-3-26					9·5	17	23	20	200	60	80	—60	20	Trace.	·0472	·1478	·0028	·0380	·1391	0067	·0292	·1043

Results of Expl, Bed 13—(*contd*)

Date.	Started on.	Stopped on.	Total No. of days, worked.	Total quantity of water passed in million gallons.	Opacity.			Bacteriological rusults.						Chemical results—parts per 100,000.								
								Raw water.		Coke water.		Sand bed.		Raw water.			Coke bed.			Sand Bed.		
					Filter water.	Coke water.	Raw water.	L. F.	Total counts.	L. F.	Total counts.	L. F.	Total counts.	Amm. Nitrogen.	Albd Nitrogen.	Oxy absorbed.	Amm. Nitrogen.	Albd Nitrogen.	Oxy absorbed.	Amm. Nitrogen.	Albd Nitrogen.	Oxy absorbed.
1-4-26	...	...	...	...	9	17	22	5	800	5	600	10	480	trace	·0380	·1524	·0011	·0282	·1333	·0028	·0180	·0952
...	9-4-26	25-4-26	16	23·00						*4th*	*Run.*											
10-4-26	...	...	...	...	9·5	16	20	5	1000	5	700	10	400	.0022	·0516	·1444	trace	·0472	·1111	·0078	·0336	·0889
12-4 26	...	...	...	...	10	16	20	5	800	5	600	10	500	·0022	·0492	·1574	·0017	·0380	·1474	·0028	·0360	·0947
23-4-26	...	...	...	...	8	17	22	5	940	20	400	—60	200	·0028	·0536	·1800	·0022	·0380	·1709	·0112	·0336	·1400
...	27-4-26	9-5-26	13	18·50						*5th*	*Run.*											
28-4-26	...	...	...	...	9 5	17	21	1	700	1	550	5	400	·0039	·0400	·1545	·0028	·0380	·1545	·0106	·0292	·1091
29-4-26	...	...	...	...	8·5	17	21	5	900	1	680	10	380	trace	·0472	·1636	trace	·0400	·1636	trace	·0224	1273
1-5 26	...	...	...	...	8·5	17	21	5	1000	5	800	10	750	·0011	·0628	·1636	trace	·0400	·1545	·0062	·0360	·1000
3-5-26	...	...	...	...	8·5	18	22	5	1200	10	700	20	600	·0017	·0516	·1800	trace	·0400	·1600	·0068	·0360	·1400
4-5-26	...	...	...	...	8·5	17	22	10	980	20	560	—60	600	trace	·0400	·1778	trace	·0336	·1556	·0078	·0224	·1333
5-5-26	...	...	...	...	8·5	17	22	5	900	60	400	—60	300	·0039	·0476	·1514	·0050	·0424	·1297	·0090	·0360	0973
7-5 26	...	...	...	...	8·5	17	21	5	1280	5	900	20	420	·0034	·0492	·1778	·0039	·0148	·1611	·0100	·0268	·1111
...	14-5-26	25-5-26	12	16·16						*6th*	*Run.*											
18-5-26	...	...	...	...	9	17	22	1	1860	5	1340	20	800	...	...	...	Nil	...	...	...	...	...
19-5-26	...	...	...	...	9	17	22	5	2200	5	1400	60	740	...	...	...	,,	...	...	...	...	...

Results of Expl. Bed 13.—*Contd.*

Date.	Started on.	Stopped on.	Total No. of days worked.	Total quantity of water passed in million gallons.	Opacity.			Bacteriological results.						Chemical results parts per 100,000.								
								Raw water.		Coke bed.		Sand bed.		Raw water.			Coke bed.			Sand bed.		
					Filter water.	Coke water.	Raw water.	L. F.	Total counts.	L. F.	Total counts.	L. F.	Total counts.	Amm. Nitrogen.	Albd. Nitrogen.	Oxy absorbed.	Amm. Nitrogen.	Albd. Nitrogen.	Oxy absorbed.	Amm. Nitrogen.	Albd. Nitrogen.	Oxy absorbed.
											7th Run.											
1-6-26	30-5-26	10-6-26	11	16·60	11	16	19	10	1120	5	800	20	700	·0022	0472	·1913	trace	·0400	·1565	trace	·0268	·1217
2-6-26	...	...	...	...	11	15	18	10	820	20	590	—60	310	trace	·0536	·1739	trace	·0448	·1565	·0022	·0292	·1217
7-6-26	...	...	...	...	12	16	17	5	2500	5	1800	60	420	trace	0472	·1702	·0022	·0400	·1617	·0050	·0248	·1447
9-6-26	...	...	...	...	11	16	19	5	1200	5	800	20	500	·0050	·0424	·1833	·0022	·0360	·1167	·0073	·0312	·1167
10-6-26	...	...	...	...	10	16	19	10	600	5	540	20	470	·0056	·0472	·2000	·0034	·0448	·1436	·0022	·0400	·1641
...	16-6-26	26-6-26	10	15·00							*8th Run.*											
18-6-26	...	...	...	...	9·5	15	18	5	1650	5	850	5	330	·0045	·0424	·1556	·0022	·0424	·1444	·0045	·0268	·1111
22-6-26	...	...	...	...	10	14	18	10	800	5	700	20	400	·0028	·0424	·1778	...	...	·1556	...	...	·1111
25-6-26	...	...	...	...	10	16	18·5	10	1200	20	600	—60	240	·0017	·0492	·1600	trace	·0448	·1400	·0034	·0200	·0800
...	1-7-26	13-7-26	12	18·00							*9th Run.*											
2-7-26	...	...	...	...	8	10·5	15	1	1200	5	800	5	600	·0045	·0360	·1405	·0034	·0380	·1513	·0022	·0268	0432
3-7-26	...	...	...	...	7·5	10·5	15	5	1400	5	750	5	640	·0028	·0400	·2000	trace	·0360	·1500	trace	·0268	·0800
5-7-26	...	...	...	...	7·5	11	13·5	5	1400	5	1200	20	260	·0017	·0448	1556	trace	·0424	·1333	·0022	·0224	·1111
8-7-26	...	...	...	...	7	11	14	5	940	10	860	—60	200	·0039	·0400	·2000	trace	0448	·1579	·0022	·0292	·1158
9-7-26	...	...	...	...	7·5	12	16	10	1120	10	800	—60	180	·0017	·0400	·1895	·0022	0312	·1474	·0067	·0248	0947
10-7-26	...	...	...	...	8	12	16	10	960	10	700	60	210	·0017	·0436	·2000	trace	·0400	·1263	·0112	·0336	·0842
12-7-26	...	...	...	...	8	12	16	5	1120	60	840	20	100	·0022	·0424	...	·0017	·0380	...	·0045	·0292	...
13-7-26	...	...	...	...	...	Nil	...	3	740	20	620	20	80	...	Nil	...	...	Nil	...	...	Nil	...

Results of Expl. Bed 13—*Contd.*

Date	Started on.	Stopped on.	Total. No. of days worked.	Total quantity of water passed. in million gallons.	Opacity.			Bacteriological results.						Chemical results—parts per 100,000.								
								Raw water.		Coke Water.		Sand bed.		Raw water.			Coke bed.			Sand bed.		
					Filter water.	.Coke water	Raw water.	L. F.	Total counts.	L. F.	Total counts.	L. F.	Total counts.	Amm. Nitrogen.	Albd Nitrogen.	Oxy Absorbed.	Amm. Nitrogen.	Albd Nitrogen.	Oxy Absorbed.	Amm. Nitrogen.	Albd Nitrogen.	Oxy Absorbed.
												10th	*Run.*									
23-7-26	19-7-26	2-8-26	14	21 00	11	14	18	5	1200	5	790	20	500	·0022	0424	·1714	·0034	·0400	·1600	·0022	·0292	·1143
30-7-26	...	...	...	...	8	10·5	16	10	1600	10	360	— 60	100	·0017	·0424	·1826	trace	0380	·1826	·0028	0312	·0957
31-7-26	...	...	...	...	8½	11½	17	5	2000	20	400	60	120				Nil.					
...	8-8-26	20-8-26	12	18·00		...	...	...	...	...	...	*11th*	*Run.*									
12-8-26	...	...	...	...	8	11	1	5	1600	5	520	20	240	·0022	·0400	2000	trace	·0360	·1895	trace.	·0258	·1474
...	1-9-26	3-10-26	33	44·00	...	...	..	...	...	...	...	*12th*	*Run*	(Stop	ed the	bed for	inspec	tion du	ring th	e run	for 3	days,)
4-9-26	...	...	...	...	5	...	...	5	1000	1	900	5	600	·0028	-0448	·2000	trace	·0478	·1556	·0022	·0312	·1556
6-9-26	...	...	...	...	...	...	...	5	1200	5	1000	5	700	·0028	·0448	·1730	·0022	·0492	·1621	·0026	·0336	·1405
7-9-26	...	...	...	...	...	...	...	10	1100	5	990	5	780	·0028	0492	·1667	trace	·0448	·1556	·0017	0360	·1332
9-9-26	...	...	...	...	...	...	...	5	1200	10	600	20	300	·0067	,0536	·1600	·0028	·0492	·1486	0039	0448	,1257
10 9-26	...	...	...	...	...	...	...	5	1400	5	700	20	400	·0017	0472	,1730	,0017	,0448	,1622	,0023	,0400	,1405
17-9-26	...	...	...	...	...	...	...	5	1200	5	900	10	450	,0045	,0492	2000	trace	,0448	,1900	,0028	,0380	,1790
21-9-26	...	...	...	...	...	...	...	5	900	5	400	5	420	,0045	,0492	,2000	trace	0.0380	0·1900	70 0034	70 0026	0·1790
1-10-26	...	...	...	...	...	...	...	5	840	10	620	20	400	...	...	...	...	...	...	...	...	...
2-10-26	...	...	...	...	...	...	...	10	800	10	480	20	300	...	...	...	...	...	...	...	...	...
...	9-10-26	12-10-26	3	4·50	...	...	...	...	...	...	...	*13th*	*Run*	...	...	...	...	...	...	...	...	..
...	21-10-26	31-10-25	10	15·00								*14th*	*Run.*									
28-10-26	...	...	...	...	...	...	...	...	...	...	...	60	700	...	...	...	...	...	...	0·0022	0·0221	0·0952
29-10-26	...	...	...	...	...	...	...	...	...	...	...	10	900	...	...	...	...	...	...	0·0100	0·0400	0 108
30-10-26	...	...	...	...	...	...	...	...	...	...	...	10	700	...	...	...	...	...	...	0·0034	0 0336	0·0500

Results of Expl. Bed 13—(*contd*).

Date.	Started on.	Stopped on.	Total No. of days worked	Total quantity of water passed in million gallons.	Opacity.			Bacteriological results.						Chemical results parts per 100,000.								
								Raw water.		Coke bed.		Sand bed.		Raw water.			Coke bed.			Sand bed.		
					Filter water.	Coke water.	Raw water.	L. F.	Total counts.	L. F.	Total counts	L. F.	Total counts.	Amm. Nitrogen.	Albd. Nitrogen.	Oxy absorbed.	Amm. Nitrogen.	Albd. Nitrogen.	Oxy absorbed	Amm. Nitrogen.	Albd. Nitrogen.	Oxy absorbed.
6-11-26	12-11-26	22-11-26	10	15·00	8	17	28	...	...	*15th Run.*		—60	600	...	...	...	...	...	...	·0028	0180	·1167
...	20-1-27	3-3-27	39	58·50	...	...	...	...	...	*16th Run.* (Stopped for 3 days during the run).										...	...	...
26-1-27	...	...	...	...	13·5	20	22	—60	840	10	1700	10	940	·0078	·0492	·1619	trace	·0448	·1809	·0022	·0172	·1428
28-1-27	...	...	...	...	10·5	16	22	10	900	5	800	10	600	·0028	·0472	·1800	trace	·0400	·1700	·0045	·0380	·1800
1-1-27	...	...	...	...	9·0	17	22	—60	810	20	640	—60	500	trace	·0492	·1810	·0011	·0472	·1714	·0028	·0380	·1143
2-2-27	...	...	...	...	9.5	17	25	60	490	20	560	—60	440	trace	·0628	·1818	trace	·0624	·1727	·0022	·0292	·1090
5-2-27	...	...	...	...	9	19	23·5	—60	810	—60	750	—60	550	·0017	·0492	·1635	·0011	0448	·1455	·0039	·0350	·1091
7-2-27	...	...	...	...	7·5	18	24	—60	920	—60	860	—60	520	0067	·0896	·1895	·0031	0672	·1684	·0030	·0716	·1474
9-2-27	...	...	...	...	6·5	17	2[illegible]	—60	710	60	800	—60	640	trace	·0604	·1789	·0022	·0148	·1579	·0045	·0492	·1368
14-2-27	...	...	...	...	6	17	22	5	1000	5	880	—60	680	trace	·0448	·1561	trace	·0400	·1336	·0078	·0360	·1171
16-2 27	...	...	...	...	6	17	21	5	1200	10	700	20	600	trace	·0488	·2000	trace	0400	·1800	·0095	·0292	·1400
19 2-27	...	...	...	...	6·5	18	22	10	900	5	840	20	610	trace	·0448	·2000	trace	·0192	·1584	·0078	·0[illegible]00	·12[illegible]3
21-2-27	...	...	...	...	6·5	18	22	10	900	5	840	20	610	trace	·0424	·2000	trace	·0380	·1789	·0056	·0268	·1474
23-2-27	...	...	...	...	6·5	17	22	5	890	5	670	60	600	trace	·0516	·2100	·0028	·0100	·2000	·0140	·0300	·1600
25-2-27	...	...	...	...	6·5	17	22	—60	800	10	600	60	470	trace	·0448	·1850	trace	·0400	·1888	·0090	·0248	·1116

Appendix I.

Seasonal variations in the organic content of raw water.

Year.	Average figures for "absorbed oxygen" (Tidy's) parts per 100,000											
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1926 ...	0·122	0·139	0·175	0·150	0·156	0·176	0·177	0·186	0·195	0·181	0·142	0·149

Average depth of water in Red Hills Lake (near Jones Tower.)

Year.	Average depth above sea-level expressed in feet.											
	Jan.	Feb.	Mar.	April,	May.	June.	July	Aug.	Sept.	Oct.	Nov.	Dec.
1926 ...	65·77	64·32	64·32	63·55	62·40	61·02	59·43	58·44	57·54	58·93	61·62	61·61

Average daily Rainfall in the catchment area of the Red Hills Lake.

Year.	Average rainfull expressed in inches.											
	Jan.	Feb.	Mar.	April.	May.	June.	July	Aug.	Sept.	Oct.	Nov.	Dec.
1926 ...	0·035	Nil.	0·02	0·004	0·013	0·001	0·080	0·130	0·070	0·170	0·280	0·03

Turbidity figures for Raw water.

Year.	Monthly averages.											
	Jan.	Feb.	Mar.	April.	May.	June.	July	Aug.	Sept.	Oct.	Nov.	Dec.
1926 ...	2·2	23·8	24·2	21·2	21·8	17·8	16·1	17·0	30·8	...	22·6	...

APPENDIX B.

Report on the investigation made in connection with the presence of vibrio-like organisms in the city water supply, by Dr. C. S. Govinda Pillai, A.H.O.N.

(1) A detailed inspection was made of the whole course of water supply including the conduit from the Red Hills Lake to the Kilpauk Water Works, Red Hills Lake and surroundings, Macclean Channel, Cholavaram Channel and surroundings and Cholavaram Lake. 9 samples of water were taken as shown below and the result of the bacteriological examination is also given against each.

Number of the samples.	Description of the samples.	Lactose Fermenters present in how many cc. and upwards.	Total count per cc. on agar agar at 37° c.	Result of Vibrios test in 100 cc. of the sample.
1	From the margin of the lake close to Errakuppam village ...	1 c c.	2700	+
2	From a side stream from the Macclean channel, not draining into the lake	0·1 c.c.	2100	+
3	From the Macclean channel, 100 yards away from the present lake border (level) part of the lake ...	5 c.c.	2500	+
4	From a stream close to the lake which takes all washings from the Pothur village, during rains (part of the lake)	5 c.c.	2700	+
5	From the lake opposite Macclean channel	20 c.c.	940	+
6	From the middle of the lake ...	— 60 c.c.	810	+
7	From the Cholavaram lake near the head sluice	0·1 c.c.	2300	—
8	From the Cholavaram supply channel, near the bridge in Tiruvallur Trunk Road	0·1 c.c.	Countless.	+
9	From the lake near the inlet of the Cholavaram supply channel ...	5 c.c.	2400	+

(2) It will be seen from the above report that the water at the Red Hills Lake contains vibriolike organisms and also total count per c. c. is unusually a high figure.

(3) Inspection of the conduit did not reveal anything of note. But I am informed that the villagers who live near the conduit stealthily take water from the manholes. Unless this is prevented water is liable to be contaminated in this way.

(4) Inspection of Errakuppam village on the western side of Red Hills Lake facing the Corporation bungalow showed very unsatisfactory state of affairs. This village has a population of two hundred people. It has no latrine. People are using as latrine an area surrounded by prickly pears located hardly 200 yards from the margin of the lake. On the day of my inspection (Sunday the 1st) people were celebrating a festival like the one at Periapalayam and I was told at night time the crowd will come up to 400. Crude nightsoil was noted near the prickly pears already referred to. During the rains this will be washed into the Red Hills Lake. Inspection of fields around this village do not show any slight nightsoil manure. There was no history of any recent cholera in the village.

(5) The same can be said of the adjoining villages south of this Puthur, Puthur Kannadiplayam, Thirumullavayal village, Varagudu village and Murugampet village. These villages, some of them like Varagudu with a big cheri of over 500 people have no latrine. The nightsoil during rains will be washed into the lake.

(6) Inspection of the area adjoining the northern side of the Red Hills Lake showed accumulation of three cart loads of manure containing nightsoil. This was found on a field 400 yards away from the border of the lake midway between Mr. Rangachari's garden and Nellore Road. The cooly there could not give any information regarding the ownership, etc. Water Works Overseer with the help of the lascars got the bits of nightsoil removed and the cooly was warned not to bring the nightsoil manure there.

(7) Macclean Channel is now dry. During rainy season it will bring all surface drainage water from further off as far as Avadi.

(8) Cholavaram Channel allows water from Cholavaram Lake to run into the Red Hills Lake. It is now practically dry. P.W.D. Overseer told me that the last time they sent in water to Red Hills Lake was towards the end of May. At present the level of the water of the Cholavaram Lake is below that of the Cholavaram Channel. Cholavaram Channel and banks are kept fairly clean.

Red Hills water supply is highly polluted with nightsoil contamination, mostly from the villages around the Red Hills Lake and possibly as a result of manhole contamination of the conduit.

RECOMMENDATIONS.

(1) Chlorination should be pushed to a safe limit. The dose should be increased to make up for the loss of contact until vibrios disappear in the city water supply.

(2) Contamination of water through manholes should be prevented. At present there is only one lascar for the whole length of the conduit as per Water Works Overseer's statement. At least two more may be appointed. This nuisance will stop only when the villages are provided with water supply. The Collector of Chingleput may be addressed pointing out the danger and requesting him to move the concerned local authorities to provide water supply to these villages.

(3) It is better to acquire all the villages abutting in the lake on the western and southern side. If this is found impossible the District Health Officer, Chengleput, may be addressed to take necessary action to give these villages proper latrine accommodation on the western side of these villages far removed from the lake and ensure good conservancy.

(4) The Collector of Chingleput District may be addressed to prevent storage and use of nightsoil manure in the area noted above as it is likely to endanger the city water supply.

Annual Form No. A.—Meteorological Data—Madras

Latitude 13° 4′ North.

Longitude 80° 15′ East.

Months.	Barometer,	Reading of Thermometer,						Difference between dew point temperature and mean air temperature.	Degree of humidity complete saturation being 100.	Prevailing directions of wind.	Rainfall,			
		Dry,				Dew point,								
	Mean daily reading,	Maximum,	Minimum.	Mean daily range,	Mean daily value.	Mean daily Value,	Mean Maximum Solar Radiation.				Number of days on which rain fell.	Total fall of rain during the month,		Maximum fall of rain during 24 hours,
January ...	30·012	84·3	69·8	14·5	76·7	68·9	Not recorded.	7·8	79	E by N	4	1·11	1·11	0·61
February ...	29·992	87·5	68·3	19·2	77·6	67·4		10·2	73	E S, E	...	...		...
March ...	·938	90·6	75·3	15·3	82·4	72·0		10·4	74	S E by S	...	...		...
April ...	·862	94·8	79·5	15·3	85·7	73·9		11·8	72	S S, E	1	0·10	0·60	0·10
May ...	·763	99·0	81·8	17·2	88·3	74·2		14·1	67	...	2	0·10		0·05
June ...	·684	102·8	83·7	19·1	89·8	71·2		18·6	58	...	2	0·40		0·39
July ...	·704	96·6	78·4	18·2	85·1	71·9		13·2	68	...	11	2·77	9·05	0·96
August ...	·738	95·1	77·9	17·2	84·8	71 9		12·9	69	...	14	4·57		1·44
September ...	·754	93·7	76·9	16·8	83·8	73·6		10·2	75	S S W	9	1·71		0·35
October ...	·818	90·8	73·7	17·1	81·5	72·4		9·1	78	E	9	7·36	20·66	2·45
November ...	·922	85·0	69·9	15·1	77·2	70·2		7·0	82	N by W	8	12·21		4·60
December ...	·941	84·9	67·5	17·4	75·9	67·2		8·7	76	N	7	1·09		0·47
Annual ...	29·844	92·1	75·2	16·9	82·4	71·2	...	11·2	73	S E by E	67	31·42		...

Annual Form No. I.—Births registered by divisions during the year 1926.

1	2	3			4			5			6	7	8	9			10	11
Divisions.	Districts.	Population according to the Census of 1921.			No. of Births registered.			Ratio of Births per 1000 of population			Number of Males born to every 100 Females born.	Excess of births over deaths per 1000 of population.	Excess of deaths over births per 1000 of popu plion.	Mean ratio of births per 1000 during previous five years.			Still-Births.	*Illegitimate births.
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.				Males.	Females.	Total.		
1	Royapuram	10,400	10,591	20,891	411	367	778	39·5	35·9	37·2	111·1	...	9·1	42·0	39·8	41·0	39	55
2	Tondiarpet	8,526	8,363	16,640	491	514	1005	57·5	61·5	59·5	95·5	...	2·3	59·2	55·5	57·3	58	38
3	Washermanpet ...	1,992	11,785	23,777	477	477	954	39·8	40·5	40·1	100·0	...	14·5	50·2	47·5	48·9	66	54
4	Korukupet	8,667	7,973	16 640	408	396	804	47·1	49·7	48·3	103·0	...	5·2	46·8	46·3	46·6	53	31
5	Harbour	5'032	2,256	7,288	105	124	229	20·9	55·0	31·4	84·6	...	18·3	24·8	46·5	31·6	14	...
6	Muthialpet	9,670	5,961	15,631	149	149	298	15·4	25·0	19·1	100·0	..	8·8	17·2	26·7	20·8	16	4
7	Katchaleswaranpet ...	7,102	5,953	13,055	194	175	369	27·3	29·4	28·3	110·8	...	7·0	31·1	34·3	32·6	19	5
8	Kothawal Bazaar ...	3,120	1,997	5,117	75	70	145	24·0	35·1	28·3	107·1	...	20·5	20·5	34·6	26·0	9	1
9	Ammen Kovil	8.095	7,725	15,820	327	308	635	40·4	39·9	40·1	106·1	...	11·6	41·3	41·9	41·6	25	9
10	Seven Wells	9,748	9,880	19,628	329	274	603	33·8	27·7	30·7	120·0	...	26·0	35·0	31·2	32·9	37	40
11	Sowcarpet	4,283	3,177	7,460	83	78	161	19·4	24·6	21·6	106·4	...	14·2	19·1	26·1	22·1	12	8
12	Peddunaickenpet ...	8,953	8.622	17,575	350	327	677	39·1	37.9	38·5	107.0	...	12·7	40·8	39·5	40·2	26	8
13	Trevelyan Basin ...	8,762	8,510	17,272	294	278	572	33·6	32·7	33·1	105·7	...	10·7	34·0	35·5	34·7	27	38
14	Esplanade	1,548	1,116	2,662	45	40	85	29·1	35·8	31·9	112·5	...	138·5	30·3	40·3	34·5	6	...
15	Park Town	9,588	7,956	17,544	246	245	491	25·7	30·8	28.0	100·4	...	7·4	27·1	33·2	29·9	26	13
16	Perambur	15,492	13,167	29,489	720	722	1442	46·5	51·7	48·9	99·7	2·3	...	39·0	41·3	40·1	74	18
17	Chulai	12,306	11,715	24,021	550	538	1088	44·7	45·9	45·3	102·2	0·1	...	45·7	45·4	45·5	57	17
18	Purasawalkam	10,475	10,181	20,656	447	438	885	42·7	43·0	42·8	102·0	3·7	...	43·2	42·4	42·8	32	18
19	Vepery	10,075	9,224	19,209	435	428	863	43·2	46·4	44·7	101·1	...	1·5	43·5	45·9	44·6	39	36
20	Egmore	13,870	11,757	25,627	602	595	1197	43·4	50·6	46·7	101·1	10·7	...	45·8	51·6	48·5	90	13
21	Kilpauk	9,667	8.873	18,540	369	382	751	38·2	43·1	40·5	96·5	1·9	...	36·6	37·5	37·0	22	18
22	Nungambakkam ...	11,242	10,402	21,644	434	388	822	38·6	37·3	38·0	111·8	5·3	...	35·0	36·2	35·6	38	49
23	Chintadripet	12,259	11,588	23,790	510	510	1020	41·6	44·2	42·9	100·0	...	1·4	48·8	48·3	48·6	52	23
24	Thiruvateeswaranpet ...	12,556	11,639	24,195	657	642	1299	52·3	55·7	54·6	102·3	4·7	...	52·4	54·8	53·6	53	18
25	Chepauk	7,054	6,223	13,279	336	325	661	47·6	52·2	49·8	103·3	7·7	...	47·9	47·4	47·7	44	12
26	Triplicane	8,675	7,831	16,506	351	345	696	40·5	44·1	42·1	101·1	6·9	...	38·6	42·4	40·4	26	34
27	Amir Mahal	7,591	7 663	15,254	390	366	756	51·4	47·8	49·6	106·5	0·6	...	51·1	48·8	5 0	26	9
28	Mirsahibpet	9,286	9,345	18,681	524	518	1042	56·4	55·4	55·9	101·1	5·1	...	51·6	49·5	50·6	46	17
29	Rayapettah	11,606	11,167	22,773	499	458	957	43·0	41·0	42·0	108·9	1·2	...	42·0	41·0	41·5	40	9
30	Mylapore	9 394	8,464	17,858	376	339	715	40·0	40·0	40·0	110·9	5·7	...	34·7	37·7	36·1	33	5
		2,77,044	2,51,747	5,28,791	11,184	10,816	22,000	40·4	43·0	41·6	103·4	...	7·1	40·8	42·6	41·7	1,105	600

* Included in the total number of births shown in columns 4 and 10.

Annual Form No. II—Statement of Deaths by divisions during the year 1926.

1	2	3	4	5			6			7	8																9		
Divisions.	Districts.	Area in acre.	Density per acre.	Population according to the Census of 1921.			Number of Deaths registered.			Number of deaths of males to every 100 deaths of females.	Deaths per 1,000 of population from												All causes.			Mean ratio of deaths per 1,000 during previous five years		
				Males.	Females.	Total.	Males.	Females.	Total.		Cholera.	Small-pox.	Measles.	Plague.	Malaria.	Enteric fever.	Other fevers.	Dysentery and Diarrhoea.	Tubercle.	Respiratory diseases.	Injuries.	Deaths from child birth.	All other causes.	Males.	Females.	Total.	Males.	Females.	Total.
1	Rayapuram ...	557	37·5	10,400	10,491	20,891	516	453	969	113·9	0·2	0·3	...	...	3·7	0·4	4·4	8·3	1·5	7·6	0·6	0·5	18·7	49·6	43·1	46·4	41·1	39·0	40·1
2	Tondiarpet ...	464	36·4	8,536	8,363	16,899	524	521	1,045	100·6	0·05	0·05	0·05	...	3·8	0·1	6·5	10·3	2·5	10·5	0·3	1·5	26·2	61·4	61·1	61·8	67·2	59·4	62·8
3	Washermanpet ...	321	74·1	11,992	11,785	23,777	629	670	1,299	93·9	0·2	0·1	...	...	2·9	0·3	0·08	4·3	1·6	17·5	0·3	0·4	22·2	52·5	56·9	57·0	47·6	46·7	49·3
4	Korukupet ...	2,093	8·0	8,667	7,973	16,640	455	437	892	104·1	0·3	0·2	...	...	2·3	0·2	0·3	3·9	2·5	14·8	0·7	0·5	27·9	52·5	54·8	53·6	45·6	47·6	46·6
5	Harbour ...	114	63·9	5,032	2,256	7,288	183	180	363	101·7	0·2	...	...	...	7·4	0·1	0·7	7·7	2·0	11·4	0·4	0·8	18·9	36·3	79·8	49·9	31·4	69·5	45·4
6	Muthialpet ...	986	15·9	9,670	5,961	15,631	212	225	437	94·2	0·1	0·1	...	...	5·5	0·4	1·5	1·9	1·5	4·9	0·3	0·5	11·2	21·9	37·7	28·0	20·7	35·5	26·4
7	Kachaleswaranpet ...	112	116·6	7,102	5,953	13,055	250	211	461	118·5	0·2	0·8	0·07	...	5·0	0·5	1·8	4·6	2·0	7·8	0·5	0·4	11·6	35·2	35·4	35·3	35·4	38·1	44·4
8	Kothawal Bazaar ...	96	53·3	3,120	1,997	5,117	133	117	250	113·7	0·2	0·1	...	...	10·6	...	3·1	5·0	2·9	10·9	0·4	0·6	14·8	42·6	58·6	48·8	41·9	52·0	45·9
9	Ammen Kovil ...	110	143·8	8,095	7,725	15,820	412	408	820	101·0	0·1	..	...	...	2·5	0·4	1·8	7·3	5·0	9·5	0·3	1·3	23·7	50·9	52·8	51·8	49·6	52·5	51·0
10	Seven Wells ...	123	159·6	9,748	9,880	19,628	612	503	1,115	121·7	0·05	0·1	...	...	2·9	0·6	1·7	8·7	6·0	9·7	0·6	0·6	26·4	62·8	61·9	56·9	51·7	50·8	52·8
11	Sowcarpet ...	58	128·6	4.283	3,177	7 460	127	140	267	90·7	0·1	..	0·1	...	2·8	0·5	2·1	2·1	3·4	7·2	0·4	1·2	15·4	29·6	44·0	35·8	30·5	45·0	36·7
12	Peddunaickanpet ...	155	113·4	8,953	8,622	17,575	455	446	901	102·0	0·05	0·1	0·05	...	2·6	0·6	2·1	5·7	3·9	10·8	0·3	0·7	24.2	50·8	51·7	51·3	45·2	48·1	46·0
13	Trevelyan Basin ...	114	151·5	8,762	8 510	17,272	352	405	757	86·9	...	0·1	...	...	4·6	0·06	0·7	6·1	2·8	10·2	0·5	0·8	17·9	40·2	47·6	43·8	41·7	43·8	42·7
14	Esplanade ...	139	19·2	1,548	1,116	2,662	317	137	454	231·3	0·7	...	...	...	7·7	2·6	0·3	17·3	16·5	21·0	9·4	1·1	129·0	204·8	122·8	170·4	183·4	103·0	149·7
15	Park Town ...	120	146·2	9.588	7,956	17,544	296	326	622	90·8	0·3	0·1	...	...	2·2	0·4	0·5	3·7	2·2	8·2	0·1	0·4	17·4	30·9	40·9	35·5	33·6	39·5	36·3
16	Perambur ...	2,528	11·7	15,492	13,967	29,489	696	677	1,373	102·8	0·1	0·2	...	...	3·3	0·2	0·4	10·2	2·5	13·8	0·6	0·7	14·7	44·9	49·2	46·6	34·6	37·5	55·6
17	Choolai ...	230	104·4	12,306	11,715	24,021	540	545	1,085	99·1	0·1	0·1	...	...	2·9	0·3	1·8	8·4	3·8	10·4	0·2	0·5	16·4	43·9	46·5	45·2	40·8	41·7	41·2
18	Purasawalkam ...	269	76·8	10,475	10.181	20,656	381	424	805	89·9	...	0·09	0·04	...	1·7	0·14	1·6	7·5	3·3	7·8	0·2	0·4	16·0	36·4	41·6	38·9	35·8	36·7	36·2
19	Vepery ...	450	42·9	10,075	9,224	19,299	435	457	892	95·2	0·2	0·09	...	...	1·0	0·3	3·8	8·5	3·8	9·4	1·2	0·7	17·0	43·2	49·5	46·2	40.6	41·8	41·1
20	Egmore ...	698	36·7	13,870	11 757	25,627	435	486	921	89·5	0·1	...	...	...	0·8	0·3	3·7	6·6	2·2	5·0	0·1	1·8	15·2	31·4	41·3	35·5	30·4	37·1	33·5
21	Kilpauk ...	1,099	16·9	9,667	8,873	18,540	378	336	714	112·5	0·5	0·1	0·05	...	0·7	0·4	2·2	7·3	2·8	6·4	1·3	0·6	16·7	39·1	37·9	38·6	35·3	34·0	34·7
22	Nungambakam ...	1,996	10·8	11,242	10,402	21,644	329	377	706	87·3	...	...	...	...	0·4	0·2	2·7	7·4	1·7	5·7	0·3	0·09	14·3	29·3	36·2	32·6	32·1	30·5	32·2
23	Chintadripet ...	201	118·4	12,259	11,531	23,790	516	538	1,054	95·9	0·2	...	...	...	1·0	0·4	5·2	8·2	2·3	8·3	0·1	0·8	17·6	42·1	46·7	44·3	42·4	42·4	42·4
24	Tiruvatteswaranpet ...	333	72·7	12.556	11,639	24.195	567	616	1,183	92.0	0·5	...	0·1	...	2·6	0·1	3·0	9·7	3·6	9·3	0·3	0·3	19·2	45·2	52·9	48·9	45·6	45·7	45·7
25	Chepauk ...	705	18·8	7,054	6,223	13,279	270	288	558	93·8	0·1	...	...	...	1·3	0·3	1·6	5·7	3·9	7·9	0·6	0·9	19·8	38·3	46·3	42·0	35·9	37·2	36·6
26	Triplicane ...	168	98·2	8,675	7,831	16,506	297	285	582	104·2	0·4	...	0·06	...	0·7	0·2	0·8	4·2	2·5	7·2	0·4	0·8	17·9	34·1	36·4	35·3	33·1	37·1	35·0
27	Amir Mahal ..	169	90·3	7,591	7,663	15.254	404	342	746	118·1	0·3	...	0·2	...	1·7	0·3	3·1	9·5	2·8	9·9	0·4	0·2	20·3	53·2	44·6	48·9	51·3	45·8	48·5
28	Mirsahibpet ...	680	27·4	9,286	9.315	18,681	477	469	946	101·7	0·4	0·1	...	...	3·0	0·06	2·5	11·7	3·0	10·6	0·4	0·8	18·3	51·4	50·2	50·9	48·0	46·0	47·0
29	Rayapettah ...	3,115	7·3	11,606	11,167	22,773	458	470	928	97·4	0·4	0·1	0·3	...	1·8	0·13	9·2	8·7	2·8	8.6	0·2	0·3	15·5	39·5	42·0	40·8	35·8	35·1	35·4
30	Mylapore ...	1,525	11·7	9,394	8,464	17,858	320	311	631	102·9	0·2	0·05	0·06	...	1·4	0·1	2·0	7·5	1·9	6·3	0·5	0·2	15·1	34·0	36·7	35·3	32·4	35·7	34·2
	Total ...	19,728	22·2	2,77,044	2,51,747	5,28,791	11 976	11,800	23,776	101·5	0·2	0·1	0·04	....	2·6	0·3	2·3	7·3	2·9	9·3	0·5	0·7	18·9	43·3	46·9	45·0	41·1	42·3	41·7

Annual Form No III.—Deaths registered by divisions during each month of the year 1926.

1	2	3												4
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1	Royapuram	106	81	75	57	73	85	62	103	84	70	89	84	969
2	Tondiarpet	106	77	91	83	69	58	78	99	93	82	93	116	1,045
3	Washermenpet	137	120	112	97	96	99	67	121	113	118	113	106	1,299
4	Korukupet	84	94	74	66	55	73	68	83	78	65	73	79	892
5	Harbour	31	46	29	21	40	26	30	33	23	23	32	29	363
6	Muthialpet	37	51	25	40	36	45	45	38	34	26	31	29	437
7	Katchaleeswaran Koil ...	46	41	45	53	32	23	37	50	21	39	30	44	461
8	Kothawal Bazar ...	26	29	30	19	20	15	17	22	18	18	18	18	250
9	Ammen Koil	120	77	76	72	58	59	53	56	72	53	63	61	820
10	Seven Wells	125	131	116	78	99	86	62	94	82	70	80	92	1,115
11	Sowcarpet	32	23	19	15	24	14	14	29	24	26	22	20	267
12	Peddunaickenpet ...	105	83	89	71	68	58	56	83	94	59	74	61	901
13	Trevelyan Basin ...	91	69	70	63	56	49	51	64	75	64	41	64	757
14	Esplanade	47	40	29	28	45	34	28	45	34	40	38	46	454
15	Park Town	70	64	65	47	52	44	50	57	42	46	42	43	622
16	Perambur	137	117	127	116	110	118	106	132	117	102	96	95	1,373
17	Chulai	118	93	83	82	94	75	80	113	84	89	75	93	1,085
18	Purasawalkam	90	76	61	52	60	59	57	91	65	67	62	72	805
19	Vepery	89	75	59	71	77	77	83	84	88	75	53	61	892
20	Egmore	105	71	74	53	71	77	67	88	93	68	73	81	921
21	Kilpauk	76	55	71	51	57	54	62	68	60	65	60	35	714
22	Nungambakkam ...	72	67	53	46	68	52	48	76	59	60	54	51	706
23	Chintadripet	111	98	88	95	84	82	81	106	79	69	79	82	1,054
24	Tiruvatteswaranpet ...	115	91	135	101	100	96	99	88	102	87	73	96	1,183
25	Chepauk	56	55	63	43	39	41	39	43	53	44	48	34	558
26	Triplicane	68	53	49	52	47	35	48	44	54	44	42	46	582
27	Amir Mahal	77	67	90	54	52	52	55	72	65	56	51	55	746
28	Missahibpet	89	81	92	75	76	57	62	106	82	72	74	80	946
29	Royapettah	90	68	71	97	77	75	72	87	78	80	65	68	928
30	Mylapore	58	44	46	39	51	60	42	56	54	70	57	54	631
	Total ...	2,514	2,142	2,116	1,837	1,886	1,778	1,719	2,231	2,020	1,847	1,791	1,895	23,776

Annual Form No. IV:—Deaths registered according to age by divisions during the year 1926.

1	2	3		4		5		6		7		8		9		10		11		12	
Divisions.	Districts.	Under 1 year.		1 year and under 5 years.		5 years and under 10 years.		10 years and under 15 years.		15 years and under 20 years.		20 years and under 30 years.		30 years and under 40 years.		40 years and under 50 years.		50 years and under 60 years.		60 years and upwards.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	Royapuram ...	152	105	98	97	36	23	16	15	9	14	32	23	21	37	33	25	31	25	88	89
2	Tondiarpet ...	150	123	91	107	29	28	11	8	7	17	26	48	40	41	37	23	32	28	102	98
3	Washermanpet ...	175	162	120	133	29	36	15	24	18	19	38	49	40	54	46	31	37	39	111	123
4	Korukkupet ...	140	120	67	94	27	12	8	9	14	12	31	43	36	32	26	22	26	15	80	78
5	Harbour ..	44	43	32	33	3	9	5	4	5	7	16	14	13	15	16	11	16	6	33	38
6	Muthialpet ...	4	47	27	30	8	9	5	10	8	10	17	21	25	14	22	15	24	19	35	50
7	Katchaleswarpet ...	66	43	26	31	11	7	5	12	13	7	21	30	25	24	25	13	24	12	34	32
8	Kothawal Bazaar ...	27	25	18	10	4	3	2	4	8	7	10	8	14	14	16	9	12	14	21	23
9	Ammen Kovil ...	97	82	58	51	10	13	5	12	16	13	27	54	33	32	42	27	35	35	89	92
10	Seven Wells ...	110	91	55	64	13	17	27	12	17	15	73	71	58	42	69	45	70	52	120	94
11	Sowcarpet ...	27	22	15	19	3	4	2	1	5	12	11	14	19	11	12	11	18	11	15	35
12	Peddunaickenpet ...	119	100	67	70	21	24	9	11	7	16	37	44	32	42	40	26	42	22	81	91
13	Trevelyan Basin ..	98	79	67	71	23	14	10	9	6	20	28	39	22	24	19	33	23	26	56	90
14	Esplanade ...	15	18	12	21	6	2	13	8	13	8	71	14	51	17	60	13	35	13	41	23
15	Park Town ..	87	98	29	46	12	12	11	8	4	13	30	22	19	29	29	20	23	22	52	56
16	Perambur ...	211	181	145	138	29	35	11	15	14	18	51	42	41	48	26	31	44	34	56	135
17	Choolai ...	163	147	95	96	23	23	11	6	11	23	39	48	38	41	31	25	36	35	93	100
18	Purasawalkam ...	113	107	68	95	12	15	8	3	13	10	23	37	19	18	16	16	24	29	85	94
19	Vepery ...	118	113	81	80	29	23	7	11	10	16	37	42	31	22	26	25	32	29	63	96
20	Egmore ...	142	144	84	79	16	17	12	4	14	28	28	58	22	40	16	17	39	27	54	72
21	Kilpauk ...	87	90	60	51	22	16	12	9	7	11	25	34	26	30	21	9	27	12	88	74
22	Nungambakkam ...	88	86	77	85	16	10	1	8	5	7	17	31	27	23	23	24	19	25	56	69
23	Chintadripet ...	170	143	88	122	19	7	9	6	9	23	42	57	39	31	29	21	29	26	93	161
24	Thiruvattiswaranpet ...	177	150	94	111	19	23	7	7	16	21	43	63	48	45	34	23	29	32	97	141
25	Chepauk ..	72	63	40	58	9	7	...	6	1	14	22	38	25	22	18	10	25	15	58	54
26	Triplicane ...	101	77	55	59	12	15	2	6	13	7	11	23	17	20	17	13	21	12	46	55
27	Amir Mahal ...	117	101	68	69	16	10	7	9	15	11	27	36	24	23	28	7	20	9	80	68
28	Mirsahibpet ...	142	124	85	89	28	30	6	11	10	10	32	39	35	24	29	21	27	22	85	97
29	Royapettah ...	122	109	96	88	19	25	11	13	8	21	29	50	28	35	28	15	37	17	81	99
30	Mylapore ...	99	83	50	55	14	9	7	5	3	12	15	33	17	17	16	16	26	22	71	58
	Total ...	3,269	2,876	1,968	2,152	520	477	261	266	298	423	909	1,125	895	868	870	597	884	684	2,102	2,532
	Ratio per 1,000 ...	292·3	265·9	96·8	103·1	18·4	16·8	9·4	11·0	12·0	16·7	15·9	20·6	18·7	22·7	26·6	22·6	46·9	42·8	16	233·5

1	2	3					4					5				
		Population of census of 1921·					Number of deaths registered.					Ratio of deaths per 1000 of population.				
Divisions.	Districts.	Christians.	Hindus.	Mahomedans.	Others.	Total.	Christians.	Hindus.	Mahomedans.	Others.	Total.	Christians.	Hindus.	Mahomedans.	Others.	Total.
1	Royapuram	5612	14269	896	117	20891	201	702	66	...	969	35·8	49·2	73·6	...	46·4
2	Tondiarpet	363	15183	1346	7	16899	19	919	107	...	1045	52·3	60·5	79·4	...	61·8
3	Washermanpet	1197	21184	1427	5	23777	50	1177	72	...	1299	41·7	55·5	50·4	...	57·0
4	Korukkupet	377	13844	2395	24	16640	17	738	137	...	892	45·0	53·3	57·5	...	53·6
5	Harbour	355	3875	2954	104	7288	3	134	226	...	363	8·4	34·5	76·5	...	49·9
6	Muthialpet	1102	12349	2179	...	15631	10	391	36	...	437	9·0	31·6	16·5	...	28·0
7	Katchaleswaranpet	1859	10259	879	58	13055	43	382	36	...	461	23·1	37·2	40·9	...	35·3
8	Kothawal Bazaar	190	3943	951	33	5117	10	224	16	...	250	52·6	56·8	16·8	...	48·8
9	Amman Kovil	1977	11149	2627	67	15820	81	571	168	...	820	40·9	51·2	63·9	...	51·8
10	Seven Wells	1410	17207	931	80	19628	83	961	71	...	1115	58·8	55·8	76·2	...	56·8
11	Sowcarpet	10	7058	41	353	7460	1	266	...	...	267	100·0	37·6	...	...	35·8
12	Peddunaickenpet	13	17261	247	37	17575	1	891	9	...	901	76·9	51·6	36·4	...	51·3
13	Trevelyan Basin	23	17082	112	105	17272	1	755	1	...	757	43·4	44·1	8·9	...	43·8
14	Esplanade	12	2450	100	72	2664	47	378	28	1	454	3916·6	154·2	280·0	13·9	170·4
15	Park Town	851	16372	262	59	17544	6	613	3	...	622	7·0	37·4	11·4	...	35·5
16	Perambur	1085	22457	5722	95	29459	37	1071	265	...	1373	34·1	47·6	46·3	...	46·6
17	Choolai	1410	22167	437	7	24021	43	1015	27	...	1085	30·4	45·7	61·7	...	45·2
18	Purasawalkam	3088	17146	382	40	20656	110	687	8	...	805	35·6	40·0	20·9	...	38·9
19	Vepery	3584	14245	1408	62	19299	109	721	62	...	892	30·4	50·6	44·0	...	46·2
20	Egmore	4582	18682	2238	125	25627	127	719	75	...	921	27·7	38·4	33·5	...	35·5
21	Kilpauk	2504	15534	471	31	18540	59	628	27	...	714	23·5	40·4	57·3	...	38·6
22	Nungambakkam	3045	16944	1524	131	21644	95	543	68	...	706	31·1	52·0	44·6	...	32·6
23	Chintadripet	2011	20726	990	63	23790	65	930	59	...	1054	32·3	44·8	59·5	...	44·3
24	Thiruvattiswaranpet	776	15249	8115	55	24195	26	726	430	1	1183	33·5	47·6	52·9	18·2	48·9
25	Chepauk	412	9861	3004	...	13277	9	373	176	...	558	21·8	37·8	58·5	...	42·0
26	Triplicane	50	16060	383	13	16506	...	566	16	...	582	...	35·2	41·7	...	35·3
27	Amir Mahal	536	8956	5752	10	15254	13	441	292	...	746	24·2	49·2	50·7	...	48·9
28	Mirsahibpet	1146	13988	3452	45	18631	23	715	208	...	946	20·0	51·1	60·2	...	50·9
29	Royapettah	1891	19324	1485	73	22773	69	781	78	...	928	36·4	40·4	52·5	...	40·8
30	Mylapore	2671	14640	528	19	17858	70	534	27	...	631	26·1	36·4	51·1	...	35·3
	Total ...	44160	429155	53586	1890	528791	1428	19552	2794	2	23776	32·3	45·6	52·1	1·1	45·0

Annual Form No. VI.—Deaths registered from "CHOLERA" by Divisions during each month of the year 1926.

1	2	3												4			5			6
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Rates of Deaths per 1000 of population.			Mean ratio per 1000 during previous five years.
														Males.	Females.	Total.	Males.	Females,	Total.	
1	Royapuram ...	2	1	2	...	...	...	...	...	...	...	...	...	3	2	5	0·3	0·2	0·2	0·2
2	Tondiarpet ...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	0·1	0·05	0·1
3	Washermanpet ...	2	2	1	1	...	...	...	...	...	...	...	...	3	3	6	0·2	0·2	0·2	0·1
4	Korukkupet ...	1	2	...	...	...	...	...	...	...	...	...	2	5	...	5	0·6	...	0·3	0·3
5	Harbour ...	2	...	...	...	...	...	...	...	...	...	...	...	1	1	2	0·2	0·4	0·2	0·1
6	Muthialpet ...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	...	0·2	0·1	0·1
7	Kalchaleswaranpet ...	1	1	1	...	...	...	...	...	...	...	...	...	2	1	3	0·3	0·1	0·2	0.2
8	Kothawal Bazaar ...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	1	0·3	...	0·2	0·2
9	Ammen Kovil ...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1		0·1	0·1	0·4
10	Seven Wells ...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	1	0·1	...	0·05	0·3
11	Sowcarpet ...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	0·3	0·1	0·1
12	Peddunaickenpet ...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	0·1	0·05	0·1
13	Trevelyan Basin ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·1
14	Esplanade ...	1	1	...	...	...	...	...	...	...	...	...	...	...	2	2	...	1·7	0·7	1·1
15	Park Town ...	...	2	3	...	...	...	...	...	...	...	...	...	4	1	5	0·4	0·1	0·3	0·2
16	Perambur ...	1	...	1	...	...	...	...	...	...	...	...	...	1	1	2	0·1	0·1	0·1	0·1
17	Choolai ...	1	...	2	...	...	...	...		...	...	...	...	1	2	3	0·1	0·2	0·1	0·1
18	Purasawalkam ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·1
19	Vepery ...	1	2	1	...	...	...	...	...	...	...	...	...	4	...	4	0·4	...	0·2	0·2
20	Egmore ...	1	...	1	...	...	...	...	...	1	...	...	...	2	1	3	0·1	0·1	0·1	0·1
21	Kilpauk ...	6	...	3	...	...	...	...	...	...	...	...		2	7	9	0·2	0·8	0·5	0·1
22	Nungambakkam ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·1
23	Chintadripet ...	3	1	...	...	1	...	...	...	...	...	...	...	2	3	5	0·2	0·2	0·2	0·1
24	Tiruvatiiswaranpet ...	...	...	12	...	...	...	...	...	...	...	...	...	3	9	12	0·2	0·8	0·5	0·2
25	Chepauk ...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	...	0·2	0·1	0·2
26	Triplicane ...	5	1	...	...	...	1	...	...	...	...	...	...	4	3	7	0·5	0·4	0·4	0·3
27	Amir Mahal ...	...	...	5	...	...	...	...	...	...	...	...	...	1	4	5	0·1	0·4	0·3	0·2
28	Mirsahibpet ...	...	6	2	...	...	...	...	...	...	...	...	...	7	1	8	0·7	0·1	0·4	0·5
29	Royapettah ...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	0·1	0·04	0·1
30	Mylapore ...	...	...	...	...	...	...	...	...	3	...	...	...	...	3	3	...	0·3	0·2	0·2
	Total ...	32	21	34	1	1	1	...	1	5	...	...	2	47	51	98	0·2	0·2	0·2	0·2

Annual Form No. VII—Deaths registered from "Small-Pox" by divisions during each month of the year 1926.

1	2	3												4			5			6
Divisions	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	Setptember.	October.	November.	December.	Total.			Ratio of deaths per 1000 of population.			Mean ratio per 1000 during previous 5 years.
														Males	Females.	Total.	Males.	Females.	Total.	
1	Rayapuram .	...	...	...	...	1	...	1	1	3	1	...	...	3	4	7	0,2	0,3	0,3	1,3
2	Tondiarpet ...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	...	0,1	0,05	2,1
3	Washermanpet ...	...	1	...	...	...	...	...	1	1	...	...	...	3	...	3	0,2	...	0,1	2,4
4	Korukkupet ...	...	...	1	...	...	1	...	...	1	...	...	1	...	4	4	...	0,5	0,2	1,4
5	Harbour ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,4
6	Muthialpet ...	...	...	...	...	...	...	2	1	...	...	...	...	1	2	3	,1	0,3	0,1	0,8
7	Katchaleswaranpet ...	...	...	1	2	1	...	2	3	...	1	1	...	7	4	11	,9	0,6	0,8	0,9
8	Kothawal Bazaar ...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	,3	...	0,1	1,4
9	Ammen Kovil ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,3
10	Seven Wells ...	...	1	...	...	...		...	...	...	1	...	...	...	2	2	...	0,2	0,1	0,8
11	Sowcarpet ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0,7
12	Peddunaickenpet ...	2	...	...	...	...	...	...	...	...	...	...	...	2	...	2	0,2	...	0,1	0,7
13	Trevelyan Basin ...	1	...	...	1	...	...	...	...	...	...	...	...	1	1	2	0,1	0,1	0,1	0,8
14	Esplanade ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,1
15	Park Town ...	...	1	2	...	...	...	...	...	...	...	...	...	1	2	3	0,1	0,2	0,1	0,9
16	Perambur ...	...	...	3	...	2	...	1	...	...	...	...	...	4	2	6	0,2	0,1	0,2	0,6
17	Choolai ...	...	...	3	...	...	...	...	...	...	...	...	...	2	1	3	0,1	0,08	0,1	0,6
18	Purasawalkam ..	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	0,09	...	0,09	0,6
19	Vepery ...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	0,1	0,09	0,7
20	Egmore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0,4
21	Kilpauk ..	1	2	...	...	...	...	...	...	...	...	...	...	1	2	3	0·1	0,2	0,1	0,6
22	Nungambakkam ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0,5
23	Chintadripet ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0,7
24	Thiruvateeswaranpet ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0,8
25	Chepauk ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0,5
26	Triplicane ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0,8
27	Amir Mahal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0,9
28	Mirsahibpet ...	1	...	1	1	...	...	...	...	...	...	...	...	2	1	3	0,2	0,1	0,1	1,1
29	Royapettah ...	...	...	...	...	...	...	...	1	1	...	...	1	1	2	3	0,8	0,1	0,1	0,5
30	Mylapore ...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	0,1	...	0,05	1,1
	Total ...	8	5	11	5	4	1	6	8	6	3	1	2	31	29	60	0,1	0,1	0,1	0,9

Annual Form No. VIII.—Deaths registered from "Measles" by divisions during each month of the year 1926.

1	2	3												4			5			6
Divisions.	Districts.	January.	February.	March.	April	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1000 of population.			Mean ratio per 1000 during previous 5 years.
														Males.	Females.	Total.	Males	Females.	Total.	
1	Royapuram ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·1
2	Tondiarpet ...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	0·1	0·05	0·1
3	Washermanpet ...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·04
4	Korukupet ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·06
5	Harbour ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	Muthialpet ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·05
7	Katchaleswaranpet ...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	0 1	...	0·07	0 03
8	Kothawal Bazaar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·2
9	Ammen Kovil ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0 03
10	Seven Wells ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·05
11	Sowcarpet ..	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	0·3	0·1	0 03
12	Peddunaickenpet ..	...	...	1	...	...	...	...	...	...	...	..	...	1	...	1	0·1	...	0·05	0·02
13	Trivelyan Basin ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·02
14	Esplanade	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·07
15	Park Town ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·2
16	Perambur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·06
17	Choolai ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·2
18	Purasawalkam ...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1	0·09	...	0·04	0·04
19	Vepery ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·1
20	Egmore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·2
21	Kilpauk ...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	0 1	...	0·05	0·05
22	Nungambakam ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·1
23	Chintadripet ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·2
24	Thiruvatteeswaranpet ...	...	...	...	3	...	...	...	...	...	...	1	...	2	2	4	0·1	0 1	0·1	0·2
25	Chepauk ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·2
26	Triplicane ...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	1	...	0·1	0·06	0·4
27	Amir Mahal ...	...	...	1	2	...	...	...	...	...	...	...	...	2	1	3	0·2	0·1	0·2	0·2
28	Mirsahibpet ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·2
29	Royapettah ...	...	...	...	1	...	...	5	...	...	...	...	...	2	4	6	0·2	0·4	0·3	0·08
30	Mylapore ...	...	...	...	...	...	...	1	... ...	...	...	...	...	1	...	1	0·1	...	0·06	0·1
	Total ...	...	1	3	6	...	1	7	1	...	...	1	1	11	10	21	0·01	0·04	0 04	0·1

Annual Form No. IX.—Deaths registered from "Plague" by divisions during each month of the year 1926.

Nil.

Annual Form No. X—Deaths registered from "Malaria" by divisions during each month of the year 1926.

1	2	3												4			5			6
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Rates of deaths per 1000 of population.			Mean ratio per 1000 during previous 5 years.
														Males.	Females.	Total.	Males.	Females.	Total.	
1	Royapuram ...	6	...	3	7	5	8	2	9	6	8	10	14	45	33	78	4·3	3·3	3·7	2·5
2	Tondiarpet ...	4	2	2	6	5	2	5	7	10	9	4	9	27	38	65	3·2	4·5	3·8	3·6
3	Washermanpet ...	11	6	5	5	1	2	5	2	9	10	2	10	29	39	68	2·4	3·3	2·9	1·8
4	Korukkupet ...	5	3	4	2	1	2	3	4	1	2	5	6	23	15	38	2·7	1·9	2·3	2·2
5	Harbour ...	4	5	4	5	8	6	3	6	2	1	5	5	29	25	54	5·7	1·1	7·4	2·8
6	Muthialpet ...	8	15	6	12	9	5	8	3	4	3	3	10	44	42	86	4·6	7·0	5·5	1·5
7	Katchaleswaranpet ...	4	9	9	10	...	3	4	8	1	8	4	6	34	32	66	4·8	5·4	5·0	1·9
8	Kothawal Bazaar ...	6	9	12	...	4	2	4	8	1	2	4	2	29	25	54	9·3	12·5	10·6	5·4
9	Amman Cuil ...	5	6	1	2	...	2	1	5	7	2	3	5	20	19	39	2·5	2·5	2·5	2·8
10	Seven Wells ...	4	8	5	2	3	7	3	3	3	8	1	10	29	28	57	2·9	2·8	2·9	2·5
11	Sowcarpet ...	...	2	1	1	2	1	...	5	5	2	...	2	11	10	21	2·6	3·1	2·8	1·8
12	Peddunaickenpet ...	2	5	3	4	2	1	4	5	13	3	1	3	24	22	46	2·7	2·6	2·6	1·8
13	Trevelyan Basin ...	12	13	8	8	3	3	4	3	8	6	3	9	33	47	80	3·8	5·5	4·6	3·1
14	Esplanade ...	1	...	2	3	...	3	1	1	4	4	1	1	16	5	21	10·3	4·5	7·7	7·5
15	Park Town ...	3	5	3	7	2	3	4	4	2	1	2	2	16	22	38	1·7	2·8	2·2	2·3
16	Perambur ...	6	7	13	8	5	4	9	7	8	6	11	12	52	44	96	3·4	3·2	3·3	1·1
17	Choolai ...	5	5	11	6	3	4	5	7	3	5	10	7	37	34	71	3·0	2·9	2·9	1·2
18	Purasawakkam ...	8	6	1	...	3	...	1	2	3	5	4	2	15	20	35	1·4	2·0	1·7	1·1
19	Vepery ...	2	...	2	1	2	2	4	1	2	2	2	1	13	8	21	1·3	0·9	1·0	1·5
20	Egmore ...	4	3	...	...	3	2	2	1	1	2	1	1	9	11	20	0·7	0·9	0·8	0·6
21	Kilpauk ...	1	...	1	3	1	...	2	1	1	...	2	1	10	3	13	0·1	0·3	0·7	0·8
22	Nungambakkam ...	...	...	...	...	2	1	...	1	2	1	1	...	5	3	8	0·4	0·3	0·4	0·4
23	Chintadripet ...	6	3	4	1	2	2	1	2	...	2	...	2	8	17	25	0·7	1·5	1·0	1·6
24	Thiruvattiswaranpet ...	5	5	5	...	5	7	3	5	12	9	3	5	23	41	64	1·8	3·5	2·6	2·1
25	Chepauk ...	...	1	2	2	5	...	...	2	1	2	1	1	5	12	17	0·7	1·9	1·3	0·7
26	Triplicane ...	...	...	2	4	...	...	...	1	...	1	2	2	8	4	12	0·9	0·5	0·7	0·7
27	Amir Mahal ...	...	3	4	...	3	1	2	1	4	2	2	4	19	7	26	2·5	0·9	1·7	1·5
28	Mirsahibpet ...	6	4	6	3	3	3	5	2	5	7	7	6	23	34	57	2·5	3·6	3·0	1·3
29	Royapettah ...	4	3	1	6	3	6	...	5	4	5	2	2	23	18	41	2·0	1·6	1·8	0·9
30	Mylapore ...	4	1	3	4	...	4	...	4	2	2	...	1	12	13	25	1·3	1·5	1·4	0·5
	Total ...	126	129	123	112	85	86	85	115	124	120	96	141	671	671	1342	2·4	2·7	2·6	1·7

Annual Form No. XI.—Deaths registered from "Enteric Fever" by divisions during each month of the year 1926.

1	2	3												4			5			6
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1000 of population.			Mean ratio per 1000 during previous 5 years.
														Males.	Females.	Total.	Males.	Females.	Total.	
1	Royapuram ...	2	1	...	1	1	...	...	...	...	2	1	...	5	3	8	0·5	0·3	0·4	0·2
2	Tondiarpet ...	...	...	...	...	...	1	...	...	...	...	...	1	1	1	2	0 1	0·1	0 1	0·04
3	Washermenpet ...	1	1	...	...	...	...	...	1	...	...	1	2	3	3	6	0 3	0 3	0·3	0·01
4	Korukupet ...	...	...	...	1	...	...	...	2	...	...	...	...	...	3	3	...	0 4	0·2	0 04
5	Harbour ...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	0 2	..	0 1	0 03
6	Muthialpet ...	...	...	...	1	1	2	1	1	1	...	...		6	1	7	0 6	0 2	0·4	0 1
7	Katchaleswaranpet ...	...	...	1	2	1	...	...	1	1	...	...	...	1	5	6	0·1	0·9	0·5	0·1
8	Kothawal Bazaar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·1
9	Amman Kovil ...	...	...	3	...	...	1	...	1	...	...	1	...	4	2	6	0 5	0·3	0·4	0·1
10	Seven Wells ...	...	2	1	3	...	2	1	...	1	1	...	1	9	3	12	0 9	0·3	0·6	0 1
11	Sowcarpet ...	...	2	...	...	...	..	...	...	1	1	...	...	4	...	4	0·9	...	0·5	0·3
12	Peddunaickenpet ...	2	...	1	...	1	2	1	3	...	...	...	...	6	4	10	0·7	0 5	0 6	0·1
13	Trevelyan Basin ...	...	...	...	...	1	...	...	...	...	...	...	..	...	1	1	...	0·1	0 06	0 2
14	Esplanade ...	1	...	1	1	...	...	...	1	...	...	1	...	3	4	7	1 9	3 5	2 6	0·2
15	Park Town ...	2	...	...	2	1	1	...	...	...	...	1	...	3	4	7	0·3	0·5	0·4	0·2
16	Perambur ...	...	1	...	...	...	1	...	2	1	...	...	...	2	3	5	0·1	0 2	0 2	0·1
17	Choolai ...	2	1	...	1	...	...	..	...	...	2	1	...	3	4	7	0·2	0·4	0 3	0·1
18	Purasawalkam ...	...	...	...	1	...	...	...	...	1	...	1	...	1	2	3	0·1	0·2	0·1	0 1
19	Vepery ...	...	...	...	...	...	...	...	...	3	...	...	2	4	1	5	0·4	0·1	0 3	0·2
20	Egmore ...	...	1	1	1	...	...	1	1	...	1	2	...	4	4	8	0·3	0·4	0 3	0 2
21	Kilpauk ...	...	1	...	...	...	...	...	...	3	...	3	1	5	3	8	0 5	0 3	0·4	0 2
22	Nungambakam ...	...	1	...	...	1	1	...	1	1	...	...	...	1	4	5	0·1	0 4	0·2	0 1
23	Chintadripet ...	1	...	1	1	1	1	2	...	...	2	...	...	7	2	9	0·6	0·2	0 4	0·2
24	Thiruvatteeswaranpet ...	...	...	1	...	...	1	1	...	...	...	...	1	3	1	4	0·3	0 1	0·1	0·2
25	Chepauk ...	1	...	...	...	1	1	...	...	...	...	...	1	2	2	4	0·3	0 3	0·3	0·2
26	Triplicane ...	...	...	...	1	...	...	...	...	...	2	...	...	2	1	3	0 2	0 1	0 2	0·3
27	Amir Mahal ...	...	...	...	...	...	..	...	1	1	1	...	2	2	3	5	0·3	0·4	0·3	0 3
28	Mirsahibpet ...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	0·1	0 06	0 1
29	Royapettah ...	...	...	1	...	...	...	...	1	...	...	1	...	2	1	3	0·2	0 09	0 1	0·1
30	Mylapore ...	...	...	...	...	...	1	...	1	...	...	...	...	1	1	2	0·1	0 1	0·1	0·2
	Total ...	13	11	11	16	10	15	7	17	14	12	13	11	85	67	152	0·3	0·3	0 3	0·1

Annual Form No. XII.—Deaths registered from "Other Fevers" by divisions during each month of the year 1926.

1	2	3												4			5			6
Division.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1000 of population.			Mean ratio per 1000 during previous 5 years.
														Males.	Females.	Total.	Males.	Females.	Total.	
1	Rayapuram ...	3	11	8	7	7	7	4	9	12	9	8	6	41	50	91	3·9	4·1	4·4	3·7
2	Tondiarpet ...	14	18	12	11	3	1	8	7	9	9	10	7	49	60	109	5·7	7·2	6·5	2·5
3	Washermanpet ...	...	...	...	...	...	...	...	...	1	...	1	...	...	2	2	...	0·2	0·08	1·9
4	Korukupet ...	...	2	...	...	...	...	...	...	...	2	...	1	4	1	5	0·5	0·1	0·3	1·6
5	Harbour ...	...	...	1	1	...	1	...	...	...	1	1	...	2	3	5	0·4	1·3	0·7	1·2
6	Muthialpet ...	2	1	1	...	2	2	4	3	...	1	4	3	14	9	23	1·4	1·5	1·5	1·3
7	Kotchaleswaranpet ...	...	1	1	4	1	5	1	2	...	4	4	1	17	7	24	2·4	1·2	1·8	1·8
8	Kothawal Bazaar ...	1	3	1	...	...	2	2	2	1	1	1	2	11	5	16	3·5	2·5	3·1	3·7
9	Ammen Kovil ...	1	...	...	4	3	2	2	6	4	4	1	2	11	18	29	1·2	2·3	1·8	3·2
10	Seven Wells ...	...	2	2	2	5	1	4	3	7	5	2	1	17	17	34	1·7	1·7	1·7	2·5
11	Sowcarpet ...	3	1	1	1	1	3	2	1	...	1	1	1	8	8	16	1·9	2·5	2·1	3·2
12	Peddunaickenpet ...	1	3	4	4	2	5	2	6	3	...	3	4	17	20	37	1·9	2·3	2·1	1·4
13	Trevelyan Basin ...	1	1	1	1	...	1	1	2	...	...	1	3	7	5	12	0·8	0·6	0·7	2·6
14	Esplanade ...	...	...	...	1	1	...	...	1	...	1	2	2	5	3	8	3·2	2·7	0·3	6·0
15	Park Town ...	...	...	2	...	...	...	1	...	1	1	1	2	3	5	8	0·3	0·6	0·5	1·4
16	Perambur ...	...	1	1	4	1	...	1	1	1	...	1	...	4	7	11	0·3	0·5	0·4	0·7
17	Choolai ...	4	6	4	2	3	4	1	6	1	5	2	6	21	23	44	1·7	1·9	1·5	1·0
18	Purasawalkam ..	4	5	1	...	1	4	5	1	6	2	4	...	9	24	33	0·9	2·3	1·6	1·0
19	Vepery ..	6	7	4	11	6	6	8	13	6	3	1	2	33	40	73	3·3	4·3	3·8	1·0
20	Egmore ...	7	2	9	7	6	8	7	18	10	8	8	6	45	51	96	3·2	4·3	3·7	1·4
21	Kilpauk .	3	4	8	3	4	5	2	2	2	4	3	1	28	13	41	2·9	1·5	2·2	0·7
22	Nungambakkam ...	1	8	5	4	5	3	8	11	4	2	2	7	26	34	60	2·3	3·3	2·7	1·5
23	Chintadripet ...	10	6	12	15	8	15	9	10	11	10	8	10	65	59	124	5·3	5·1	5·2	3·0
24	Tiruvattiswaranpet ...	6	4	6	7	8	6	7	2	6	7	9	6	38	36	74	3·0	3·0	3·0	2·1
25	Chepauk ...	3	2	8	...	...	1	...	2	...	2	2	1	11	10	21	1·6	1·6	1·6	1·7
26	Triplicane ...	6	...		...	...	1	...	2	...	1	...	...	11	2	13	1·3	0·3	0·8	1·8
27	Amir Mahal ..	9	2	8	2	3	5	5	3	1	2	4	4	28	20	48	3·7	2·6	3·1	2·5
28	Mirsahibpet ...	1	1	7	...	4	6	2	2	7	6	5	5	24	22	46	2·6	2·3	2·5	3·9
29	Royapettah ...	...	2	11	...	6	8	3	7	5	3	3	3	25	26	51	2·2	2·3	2·2	2·6
30	Mylapore ...	2	4	4	1	6	...	2	...	5	7	5	1	20	17	37	2·1	2·0	2·0	2·5
	Total ...	88	97	125	92	86	102	91	122	103	101	97	87	594	597	1,191	2·1	2·4	2·3	1·9

Annual Form No. XIII—Deaths registered from "Dysentery and Diarrhœa", by divisions during each month of the year 1926.

1	2	3												4			5			6
Divisions.	Districts.	January	February.	March.	April.	May.	June.	July.	August.	September.	October.	November	December.	Total.			Ratio of deaths per 1,000 of population			Mean ratio per 1,000 during previous five years.
														Males.	Females.	Total.	Males.	Females	Total.	
1	Royapuram ...	22	17	16	8	14	15	8	23	22	12	8	9	90	84	174	8·6	8·0	8·2	8·9
2	Tondiarpet ...	16	10	10	10	9	9	10	28	17	15	13	27	85	89	174	9·9	10·6	10·3	13·3
3	Washermanpet ...	12	7	13	9	5	9	4	8	9	9	8	10	56	47	103	4·7	4·0	4·3	7·1
4	Korukkupet ...	9	9	4	6	3	2	3	4	7	4	5	9	35	30	65	4·0	3·8	3·9	7·3
5	Harbour ...	3	9	4	3	5	6	6	5	4	2	3	6	30	26	56	6·0	11·5	7·7	7·4
6	Muthialpet ...	1	2	3	...	3	3	2	5	6	2	2	...	15	14	29	1·5	2·3	1·9	2·4
7	Katchaleswaranpet ...	7	3	6	3	4	1	11	9	2	5	4	5	39	21	60	5·5	3·5	4·6	4·9
8	Kothawal Bazaar ..	3	1	3	4	3	3	...	2	2	3	1	1	17	9	26	5·5	4·5	5·0	5·0
9	Ammen Kovil ...	19	9	15	11	8	6	5	7	8	12	7	8	54	61	115	6·6	7·9	7·3	7·0
10	Seven Wells ...	20	18	21	17	15	12	7	15	12	10	13	10	96	74	170	9·8	7·5	8·7	8·4
11	Sowcarpet ...	3	1	1	...	3	...	2	...	5	1	1	1	9	9	18	2·1	2·8	2·4	2·9
12	Peddunaickenpet .	11	11	9	9	10	9	7	5	13	6	5	5	52	48	100	5·8	5·8	5·7	7·3
13	Trevelyan Basin ..	10	10	10	9	6	11	6	12	10	12	2	8	58	48	106	6·7	5·6	6·1	6·3
14	Esplanade ..	2	5	4	1	4	4	5	5	8	6	1	3	35	11	46	23·0	10·0	17·3	11·6
15	Park Town ...	6	8	12	3	4	5	2	11	3	3	3	5	30	35	65	3·1	4·4	3·7	3·1
16	Perambur ...	35	20	34	29	21	29	11	37	27	18	19	22	167	135	302	10·1	9·7	10·2	10·0
17	Choolai ...	22	19	15	12	16	14	14	23	21	17	13	16	102	100	202	8·3	8·5	8·4	10·2
18	Purasawalkam ...	8	15	15	10	14	9	11	25	16	10	9	13	73	82	155	7·0	8·0	7·5	3·3
19	Vepery ...	11	10	12	11	16	15	18	20	23	15	10	8	79	90	169	7·8	9·8	8·5	8·1
20	Egmore ...	18	13	18	14	14	15	11	12	21	10	14	9	92	77	169	6·6	6·5	6·6	6·3
21	Kilpauk ...	9	6	13	9	10	9	16	20	14	17	6	6	79	56	135	8·2	6·3	7·3	7·5
22	Nungambakkam ...	15	11	12	11	13	11	10	23	16	13	14	12	80	81	161	7·1	8·0	7·4	5·6
23	Chintadripet ...	21	20	16	9	15	11	15	28	17	13	13	17	91	104	195	7·4	9·0	8·2	9·0
24	Tiruvattiswaranpet ...	18	22	29	21	26	19	23	19	20	10	12	15	109	125	234	8·7	10·7	9·7	9·2
25	Chepauk ...	14	10	8	6	4	2	3	11	5	5	5	3	42	34	76	6·0	5·5	5·7	4·9
26	Triplicane ...	13	7	2	8	4	4	4	8	8	5	5	2	35	35	70	4·0	4·5	4·2	4·6
27	Amir Mahal ...	12	14	13	11	9	14	11	15	17	10	11	9	66	80	146	8·8	1·04	9·5	9·1
28	Mirsahibpet ...	19	16	23	20	17	8	11	38	20	15	14	11	102	110	212	10·9	11·8	11·3	9·2
29	Royapettah ...	10	10	12	25	17	20	21	25	22	17	12	9	85	115	200	7·3	10·2	8·7	7·9
30	Mylapore ...	12	8	13	7	10	13	13	12	7	13	12	14	65	69	134	6·9	8·1	7·5	6·2
	Total ...	381	319	366	296	302	288	270	455	382	290	245	273	1,968	1,899	3,867	7·1	7·5	7·3	7·5

Annual Form No. XIV.—Deaths registered from "Tubercle including Tubercle of the Lungs" by divisions during each month of the year 1926.

1	2	3												4			5			6
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total			Ratio of deaths per 1000 of population			Mean ratio per 1000 during previous 5 years.
														Males.	Females.	Total.	Males.	Females.	Total.	
1	Royapuram .	6	7	1	2	1	1	3	5	2	1	1	2	19	13	32	1·8	1·2	1·5	1·9
2	Tondiarpet ...	4	5	5	6	3	2	4	3	4	2	4	1	29	14	43	3·4	1·7	2·5	2·7
3	Washermanpet ..	5	5	2	4	3	5	2	4	...	1	3	3	17	20	37	1·4	1·7	1·6	1·3
4	Korukupet ...	3	4	5	3	1	1	...	5	4	3	8	5	22	20	42	2·5	2·5	2·5	1·6
5	Harbour ...	2	...	1	2	...	1	1	...	3	2	1	2	8	7	15	1·6	3·1	2·0	2·0
6	Muthialpet ...	...	2	3	1	3	2	4	2	4	3	...	...	8	16	24	0·8	2·7	1·5	1·7
7	Katchaleswaranpet ..		2	3	3	3		...	1	3	2	1	8	8	18	26	1·1	3·0	2·0	2·5
8	Kothawal Bezaar ...	3	1	...	2	1	...	2	...	2	1	3	...	6	9	15	1·9	4·5	2·9	2·1
9	Ammen Kovil ...	14	12	5	3	4	8	2	6	6	7	7	6	46	34	80	5·6	4·4	5·0	3·9
10	Seven Wells ..	12	15	13	7	11	7	4	12	7	5	13	12	65	53	118	6·7	5·4	6·0	4·5
11	Sowcarpet ...	2	6	2	2	1	...	3	3	...	2	2	2	12	13	25	2·8	4·0	3·4	2·2
12	Peddunaickenpet ...	11	5	7	6	7	6	5	5	3	3	5	6	33	36	69	3·7	4·2	3·9	3·1
13	Trevelyan Basin ...	9	5	7	5	5	1	3	3	2	2	3	4	21	28	49	2·4	3·3	2·8	1·9
14	Esplanade ..	3	4	...	5	4	3	2	6	...	4	4	8	35	8	43	22·6	7·1	16·5	10·[illegible]
15	Park Town ...	6	3	8	1	7	2	5	2	...	2	4	3	17	21	38	1·8	2·6	2·2	1·7
16	Perambur ...	7	10	6	4	7	5	9	2	4	5	5	9	42	31	73	2·7	2·2	2·5	1·6
17	Choolai ...	13	7	5	3	7	3	10	7	9	7	10	11	43	49	92	3·5	4·2	3·8	2·0
13	Purasawalkam ...	5	6	1	5	6	6	3	8	8	8	4	9	34	35	69	3·2	3·1	3·3	1·9
19	Vepery ...	10	8	1	3	7	7	3	4	8	8	4	10	44	29	73	4·3	3·4	3·8	2·2
20	Egmore ...	7	3	5	3	5	2	7	7	2	3	6	6	26	30	56	1·9	2·5	2·2	1·8
21	Kilpauk ...	5	2	4	4	5	6	4	5	6	8	1	2	27	25	52	2·8	2·8	2·8	2·5
22	Nungambakam ...	4	6	2	6	...	2	1	1	5	3	2	4	21	15	36	1·8	1·4	1·7	2.0
23	Chintadaipet ...	7	7	5	6	3	1	7	5	2	3	6	2	30	24	54	2·4	2·0	2·3	2·5
24	Tiruvatteswaranpet ...	8	10	7	8	6	6	9	6	7	6	9	5	45	42	87	3·6	3·6	3·6	3.3
25	Chepauk ...	4	9	5	5	1	2	9	3	3	4	3	4	29	23	52	4·0	3·7	3·9	3.1
26	Triplicane ...	7	4	4	4	4	...	7	...	2	3	2	5	23	19	42	2·7	2·4	2·5	2·3
27	Amir Mahal ..	5	4	6	3	2	3	4	3	3	4	3	3	21	22	43	2·8	2·9	2·8	3·4
28	Mirsahipet ..	3	5	7	3	6	4	5	3	4	4	6	7	32	25	57	3·4	2·7	3·0	2·6
29	Royapettah ...	2	5	6	9	6	5	2	4	8	5	4	7	32	31	63	2·8	2·8	2·8	2·0
30	Mylapore ...	4	3	1	2	5	4	1	4	...	4	4	1	15	18	33	1·6	2·1	1·9	1·5
	Total ...	171	165	122	120	124	95	121	119	111	115	128	147	810	728	1,538	2·9	2·9	2·9	2·4

Annual Form No. XV.—Deaths registered from "Respiratory Diseases" excluding Tubercle of the Lungs by divisions during each month of 1926.

1	2	3												4			5			6
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of Death per 1000 of population.			Mean ratio per 1000 during previous 5 years.
														Males.	Females.	Total.	Males.	Females.	Total.	
1	Royapuram	12	10	10	4	14	22	11	19	14	11	21	12	88	72	160	8·5	6·6	7·6	5·1
2	Tondiarpet	16	11	13	11	17	19	10	10	18	9	20	21	93	82	175	10·9	9·8	10·5	7·7
3	Washermanpet	45	35	27	34	40	34	19	52	31	36	34	30	203	214	417	17·0	18·1	17·5	10·6
4	Korukupet	24	23	26	19	16	32	16	23	21	14	17	15	133	113	246	15·4	14·1	14·8	9·4
5	Harbour	5	11	9	4	11	1	8	13	6	5	7	3	40	43	83	7·9	19·0	11·4	11·0
6	Muthialpet	6	13	3	11	4	5	12	9	3	4	2	4	35	41	76	3·6	6·8	4·9	6·2
7	Katchaleswaranpet ...	9	9	13	12	9	1	9	12	3	9	9	6	49	52	101	6·9	8·7	7·8	8·7
8	Kothawal Bazar ...	5	6	6	8	5	3	5	5	4	2	3	4	29	27	56	9·0	13·5	10·9	9·2
9	Ammen Kovil	26	8	14	14	17	5	12	10	13	11	13	7	87	63	150	10·7	8·1	9·5	8·9
10	Seven Wells	24	10	11	11	21	21	13	18	21	15	9	15	96	93	189	9·9	9·4	9·7	8·6
11	Sowcarpet	6	3	5	5	4	4	3	8	5	3	2	6	25	29	54	5·8	9·1	7·2	6·7
12	Peddunaickenpet ...	18	18	17	14	16	17	8	20	22	13	14	13	102	88	190	11·5	10·2	10·8	10·1
13	Trevelyan Basin ...	12	9	18	14	11	14	13	21	22	17	8	17	82	94	76	9·3	11·0	10·2	9·7
14	Esplanade	8	4	...	3	10	7	3	4	5	2	4	6	38	18	56	24·5	17·0	21·0	19·1
15	Park Town	17	7	12	13	10	13	13	9	19	14	9	7	70	73	143	7·3	9·1	8·2	8·2
16	Perambur	36	42	35	19	30	35	34	42	42	41	27	23	214	192	406	13·8	13·7	13·8	6·0
17	Choolai	29	16	19	21	28	22	18	29	16	22	13	17	126	124	250	10·2	10·6	10·4	7·8
18	Purasawalkam	15	18	17	9	9	14	10	20	6	17	11	16	74	88	162	7.0	8·6	7·8	6·4
19	Vepery	17	18	11	14	16	15	18	18	15	16	12	11	94	87	181	9·3	9·4	9·4	8·7
20	Egmore	16	8	11	10	12	8	9	15	17	7	2	10	60	65	125	4·6	5·5	5·0	5·6
21	Kilpauk	8	8	7	10	8	12	7	10	14	11	19	5	53	66	119	5·4	7·6	6·4	5·7
22	Nungambakkam ...	11	9	7	8	13	11	10	15	10	10	11	2	54	63	117	5·3	6·1	5·7	5·6
23	Chintadripet	21	19	16	28	19	14	13	22	17	8	9	13	93	106	99	7·5	9·0	8·3	7·6
24	Tiruvattiswaranpet ...	22	13	23	23	22	20	17	18	17	17	13	19	107	117	224	8·5	10	9·3	7·1
25	Chepauk	10	14	10	10	10	10	4	5	9	7	13	2	49	55	104	7·0	8·8	7·9	5·9
26	Triplicane	10	9	8	6	13	9	15	8	9	13	4	14	55	63	118	6·3	8·0	7·2	5·0
27	Amir Mahal	15	15	13	12	14	74	10	13	13	13	10	8	85	65	150	11·2	8·6	9·9	8·1
28	Mirsahibpet	20	13	13	17	20	16	15	21	19	18	10	16	99	99	198	10·6	10·6	10·6	8·2
29	Royapettah	27	17	9	23	18	15	11	19	20	12	12	12	104	91	195	9·0	8·0	8·6	5·3
30	Mylapore	6	5	9	6	8	16	8	9	8	12	18	7	52	60	112	5·5	7·1	6·3	5·6
	Total ...	496	401	392	393	445	429	354	497	39	389	356	341	2,489	2,443	4,932	9·5	9·7	9·3	7·4

Annual Form No. XVI.—Deaths registered from "Injuries" by divisions each month of the year 1926.

1	2	3												4			5			6
Divisions.	Districts.	January.	February	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1000 of population.			Mean ratio per 1000 during previons five years.
														Males.	Fe-males.	Total.	Males.	Fe-males.	Total.	
1	Royapuram ...	1	...	...	...	...	6	1	2	...	...	1	2	11	2	13	1·1	0·2	0·6	0·3
2	Tondiarpet ...	...	...	...	...	...	1	1	2	...	...	...	1	3	2	5	0·4	0·2	0·3	0·6
3	Washermanpet ...	...	...	...	1	2	1	...	1	1	...	1	...	5	2	7	0·4	0·2	0·3	0·3
4	Korukkupet ...	...	...	...	2	1	1	1	2	2	1	...	1	4	7	11	0·5	0·9	0·7	0·3
5	Harbour ...	...	...	...	...	...	1	...	2	...	...	...	...	2	1	3	0·4	0·4	0·4	0·5
6	Muthialpet ...	1	1	...	...	...	...	...	...	...	1	...	1	4	...	4	0·4	...	0·3	0·3
7	Katchaleswaranpet ...	3	...	...	3	...	...	...	...	...	...	...	...	4	2	6	0·6	0·3	0·5	0·2
8	Kothawal Bazaar ...	...	...	...	...	...	1	...	1	...	...	...	...	2	...	2	0·6	...	0·4	0·2
9	Ammen Kovil ...	...	...	...	...	1	...	...	...	2	...	...	1	1	3	4	0·1	0·4	0·3	0·3
10	Seven Wells ...	1	3	...	1	1	...	...	1	...	...	3	...	7	3	10	0·8	0·3	0·6	0·5
11	Sowcarpet ...	...	1	...	...	1	...	...	...	1	...	...	...	3	...	3	0·7	...	0·4	0·1
12	Peddunaickenpet ...	...	...	...	1	1	1	...	...	...	...	1	1	3	2	5	0·3	0·2	0·3	0·2
13	Trevelyan Basin ...	2	...	1	2	1	...	...	...	...	...	2	...	5	3	8	0·6	0·3	0·5	0·3
14	Esplanade ...	5	4	1	...	2	1	...	4	2	2	1	2	13	11	24	8·4	9·9	9·4	8·3
15	Park Town ...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1	0·1	...	0·1	0·2
16	Perambur ...	...	...	1	5	1	...	1	1	4	...	2	2	12	5	17	0·8	0·4	0·6	0·5
17	Choolai ...	2	...	...	1	...	...	1	...	1	...	1	...	1	5	6	0·1	0·4	0·2	0·3
18	Purasawalkam ...	1	...	...	...	...	...	3	...	...	...	1	...	3	2	5	0·3	0·2	0·2	0·4
19	Vepery ...	1	2	3	2	2	3	1	1	2	4	...	3	18	6	24	1·8	0·7	1·2	0·6
20	Egmore ...	...	...	...	...	...	...	...	1	...	...	1	...	2	...	2	0·1	...	0·1	0·2
21	Kilpauk ...	1	1	4	2	4	2	1	2	1	4	1	1	14	10	24	1·4	1·1	1·3	0·8
22	Nungambakkam ...	1	2	...	...	1	...	1	...	...	...	1	...	2	4	6	0·2	0·4	0·3	0·4
23	Chintadripet ...	...	...	...	1	...	...	...	...	...	...	1	...	...	2	2	...	0·2	0·1	0·2
24	Thiruvattiswaranpet ...	...	...	3	1	...	...	...	1	2	1	...	...	4	4	8	0·3	0·3	0·3	0·2
25	Chepauk ...	...	...	1	...	1	2	1	...	1	...	1	1	3	5	8	0·4	0·8	0·6	0·5
26	Triplicane ...	...	...	2	1	1	2	...	...	...	...	...	1	5	2	7	0·6	0·3	0·4	0·4
27	Amir Mahal ...	...	...	2	...	...	...	1	...	...	1	2	...	3	3	6	0·4	0·4	0·4	0·5
28	Mirsahibpet ...	1	1	...	...	1	...	...	...	1	3	1	...	7	1	8	0·8	0·1	0·4	0·3
29	Royapettah ...	...	1	1	1	...	...	...	1	...	...	...	1	2	3	5	0·2	0·3	0·2	0·4
30	Mylapore ...	...	1	...	1	1	1	...	1	1	...	...	3	2	7	9	0·2	0·8	0·5	0·3
	Total ...	20	17	19	25	22	24	13	23	21	17	21	21	146	97	243	0·5	0·4	0·5	0·4

Annual Form No. XVII :—Deaths registered from "Child Birth" by divisions during each month of the year 1926.

1	2	3												4			5			6
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 during previous 5 years.
														Males.	Fe-males	Total.	Males.	Fe-males	Total.	
1	Rayapuram ...	5	2	...	...	1	...	1	...	...	1	1	...	...	11	11	...	1·0	0·5	0·3
2	Tondiarpet ...	4	1	5	3	3	2	2	1	2	1	1	1	...	26	26	...	3·1	1·5	1·0
3	Washermanpet ...	...	...	...	...	1	1	1	2	1	2	1	1	...	10	10	...	0·8	0·4	0·4
4	Korukkupet ..	...	...	1	...	1	...	1	1	2	1	1	...	...	8	8	...	1·0	0·5	0·3
5	Harbour ...	1	1	...	...	1	1	...	...	...	1	...	1	...	6	6	...	2·7	0·8	1·0
6	Muthialpet ...	...	2	...	...	1	1	2	...	...	1	1	...	...	8	8	...	1·3	0·5	0·4
7	Katchaleswarar ...	2	...	1	...	...	...	...	1	...	...	...	1	...	5	5	...	0·8	0·4	0·5
8	Kothawal Bazaar ...	...	...	...	...	1	...	...	...	2	...	...	...	...	3	3	...	1·5	0·6	0·8
9	Aminen Kovil ...	2	2	1	2	1	3	...	1	4	1	2	2	...	21	21	...	2·7	1·3	0·9
10	Seven Wells ...	...	...	1	2	1	...	1	...	1	1	3	2	...	12	12	...	1·2	0·6	0·9
11	Sowcarpet ...	...	1	2	2	...	...	...	1	1	1	...	1	...	9	9	...	2·8	1·2	1·0
12	Peddunaickenpet ...	...	...	...	...	2	4	...	1	3	1	1	1	...	13	13	...	1·5	0·7	0·9
13	Trevelyan Basin ...	1	1	...	2	3	1	1	...	2	...	1	1	...	13	13	...	1·5	0·8	0·7
14	Esplanade ...	...	...	...	...	2	...	...	...	...	...	...	1	...	3	3	...	2·7	1·1	1·0
15	Park Town ...	...	1	2	...	...	...	...	...	2	1	1	1	...	8	8	...	1·0	0·4	0·6
16	Perambur ...	1	2	2	3	3	5	...	1	...	2	1	1	...	21	21	...	1·5	0·7	0·6
17	Choolai ...	...	...	1	1	3	2	1	4	...	1	...	...	...	13	13	...	1·1	0·5	0·7
18	Purasawalkam ...	...	1	...	3	1	1	...	...	1	1	...	1	...	9	9	...	0·9	0·4	0·5
19	Vepery ...	1	1	...	2	3	1	1	1	2	...	2	...	...	14	14	...	1·5	0·7	0·4
20	Egmore ...	3	1	3	1	3	6	2	5	1	6	6	9	...	46	46	...	3·9	1·8	0·9
21	Kilpauk ...	...	4	2	2	1	2	...	1	...	...	...	...	...	12	12	...	1·4	0·6	0·3
22	Nungambakkam ...	1	...	...	...	...	...	...	...	1	...	...	...	...	2	2	...	0·2	0·09	0·2
23	Chintadripet ...	...	1	1	1	4	4	1	3	...	1	3	1	...	20	20	...	1·7	0·8	0·6
24	Tiruvatiiswaranpet ...	3	...	...	...	...	...	2	1	...	1	...	...	...	7	7	...	0·6	0·3	0·5
25	Chepauk ...	...	1	1	1	1	...	3	...	1	3	1	...	...	12	12	...	1·9	0·9	0·6
26	Triplicane ...	1	1	...	2	3	3	1	...	...	...	2	...	...	13	13	...	1·7	0·8	0·7
27	Amir Mahal ...	...	...	...	...	...	2	1	...	...	...	...	...	...	3	3	...	0·4	0·2	0·5
28	Mirsahibpet ...	1	2	...	...	...	1	1	...	2	2	3	2	...	14	14	...	0·5	0·8	0·3
29	Royapettah ...	3	...	...	...	...	1	2	...	...	...	...	...	...	6	6	...	0·5	0·3	0·5
30	Mylapore ...	...	...	...	...	...	...	...	...	1	2	...	1	...	4	4	...	1·5	0·2	0·3
	Total ...	29	25	23	27	40	41	24	24	29	31	31	28	...	352	352	...	1·4	0·7	0·6

Annual Form No. XVIII—Deaths registered from "Other Causes" by divisions during each month of the year 1926.

1	2	3												4			5			6
														Total.			Ratio of deaths per 1000 of population.			
Divisions.	Districts.		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.	Mean ratio per 1000 during previous 5 years.
1	Rayapuram	...	47	32	35	28	30	26	31	35	25	25	38	39	212	179	391	20·3	17·0	18·7	33·3
2	Tondiarpet	...	47	30	44	36	29	21	37	40	33	37	41	48	236	207	443	27·5	24·7	26·2	23·0
3	Washermanpet	...	61	63	64	43	44	47	36	50	60	60	62	49	309	330	639	25·7	28·0	22·2	21·2
4	Korukkupet	...	42	51	33	33	31	34	44	42	40	38	37	40	229	236	465	26·4	29·5	27·9	22·0
5	Harbour	...	14	20	10	6	14	9	12	7	8	11	15	12	70	68	138	13·9	30·5	18·9	13·8
6	Muthialpet	...	19	15	9	15	13	25	10	13	16	11	19	11	85	91	176	8·7	15·2	11·2	11·3
7	Katchaleswaranpet	..	20	16	10	14	13	13	10	13	11	9	7	16	88	64	152	12·3	10·7	11·6	14·7
8	Kothawal Bazaar	...	8	8	8	4	6	4	4	4	6	9	6	9	37	39	76	11·8	19·5	14·8	17·4
9	Ammen Kovil	...	52	40	37	36	24	32	31	20	28	16	29	30	189	186	375	23·3	24·0	23·7	22·8
10	Seven Wells	...	64	71	62	33	42	36	29	42	30	24	36	41	292	218	510	29·9	22·0	26·4	23·5
11	Sowcarpet	..	17	10	7	4	12	6	4	11	6	15	16	7	55	60	115	12·8	18·8	15·4	17·5
12	Peddunaickenpet	...	57	41	47	33	27	13	29	38	37	33	44	28	215	212	427	24·0	24·5	24·2	20·1
13	Trevelyan Basin	...	43	30	25	21	26	18	23	23	31	27	21	22	145	165	310	16·5	19·3	17·9	17·7
14	Esplanade	..	26	24	21	14	22	16	17	23	15	21	25	20	172	72	344	111·1	64·5	129·0	80·3
15	Park Town	...	36	37	26	21	28	19	25	31	15	24	21	23	151	155	306	15·7	19·4	17·4	17·2
16	Perambur	...	51	34	31	44	40	39	40	39	30	30	30	26	198	236	434	12·7	16·9	14·7	14·3
17	Choolai	...	40	39	29	35	34	26	30	37	33	30	25	36	204	190	394	16·5	16·2	16·4	16·9
18	Purasawalkam	...	48	25	29	25	25	24	24	35	24	24	18	31	170	162	332	16·2	15·9	16·0	15·2
19	Vepery	...	39	27	25	27	25	28	30	26	27	27	22	24	147	180	327	14·5	19·5	17·0	17·0
20	Egmore	...	49	40	26	17	28	32	28	28	40	31	33	40	195	197	392	14·0	16·7	15·2	11·7
21	Kilpauk	...	42	27	29	18	24	22	30	26	19	21	25	18	158	143	301	16·3	16·1	16·7	15·5
22	Nungambakkam	...	39	30	27	17	33	23	18	24	20	31	23	26	140	171	311	12·4	16·4	14·3	12·8
23	Chintadripet	...	42	41	33	33	31	34	33	36	32	30	39	37	220	201	421	17·9	17·4	17·6	17·9
24	Tiruvateeswaranpet	...	53	37	49	38	33	38	37	35	38	36	26	45	233	232	465	18·5	19·9	19·2	19·6
25	Chepauk	...	24	18	28	19	16	23	19	20	32	21	22	21	129	134	263	18·2	21·5	19·8	18·0
26	Triplicane	...	26	51	27	26	22	15	21	25	35	19	27	22	154	142	296	17·7	18·1	17·9	17·7
27	Amir Mahal	...	36	29	38	24	21	13	21	36	26	23	19	25	177	134	311	23·1	17·4	20·3	21·2
28	Mirsahibpet	...	36	33	33	31	25	19	23	40	24	17	28	33	181	161	342	19·4	17·2	18·3	19·0
29	Royapettah	...	43	30	30	32	27	20	28	24	18	38	31	33	182	172	354	15·6	15·4	15·5	15·1
30	Mylapore	...	29	22	16	18	21	21	17	25	27	30	18	26	151	119	270	16·0	14·0	15·1	17·7
	Total	...	1150	951	888	745	776	696	741	848	786	768	803	838	5,124	4,856	9,980	18·4	19·3	18·9	18.1

Annual Form No. XIX :—Comparing the deaths from some of the principal diseases during the year with the deaths during the preceding 5 years.

Years.	Cholera.		Small-pox.		Measles.		Plague.		Malaria.		Enteric-Fever.		Other Fevers.		Dysentery and Diarrhoea.		Tuberculosis other than Pulmonary.		Respiratory System.				Injuries.		Deaths from child-birth.		All other causes.		Total Deaths.	
																			Tuberculosis (Pulmonary.)		Other Respiratory Diseases.									
	Deaths.	Ratio per 1,000	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000,	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000,	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.
1921 ...	139	0·3	180	0·3	40	0·08	3	0·006	652	1·2	85	0·2	1,475	2·8	4,149	7·9	52	0·1	905	1·7	3,510	6·7	211	0·5	216	0·4	8,621	16·4	20,268	38·5
1922 ...	17	0·03	1,121	2·1	150	0·28	1	0·002	763	1·4	74	0·1	1,325	2·5	4 167	7·9	61	0·1	1,027	1·9	3,823	7·3	181	0·3	293	0·6	9,472	18·0	22,475	42·7
1923 ...	21	0·04	151	0·3	25	0·05	1	0·002	783	1·5	51	0·1	769	1·5	3,778	7·2	76	0·1	1,192	2·3	3,342	6·3	214	0·4	330	0·6	9,200	17·5	19,933	37·8
1924 ...	97	0·2	197	0·4	32	0·06	...	...	971	1·8	65	0·1	616	1·2	3,700	7·0	121	0·2	1,347	2·6	4,130	7·8	216	0·4	322	0·6	10,146	19·3	21,960	41·7
1925 ...	203	0·4	763	1·4	96	0·2	...	...	1,298	2·5	99	0·2	940	1·8	4,031	7·6	88	0·2	1,516	2·9	4,812	9·1	219	0·4	344	0·7	10,591	20·0	25,000	47·3
Mean of the last 5 years.	95	0·2	482	0·9	69	0·1	1	0·002	893	1·7	75	0·1	1,025	1·9	3.965	7·5	80	0·2	1,187	2·3	3,923	7·4	214	0·4	301	0·6	9,606	18·2	21,927	41·5
1926 ...	98	0·2	60	0·1	21	0·04	...	...	1,342	2·6	152	0·3	1,191	2·3	3,867	7·3	177	0·3	1,361	2·6	4,932	9·5	243	0·5	352	0·7	9,980	18·9	23,776	45·0

Annual Form No. XX—Showing a complete classification of diseases arranged in the order adopted in the Nomenclature of Diseases.

	No. in the Nomenclature of Diseases.	Causes of Death.	January.	February.	March.	April.	May.	June.	July	August.	September.	October.	November.	December.	Total.
Infective Diseases.	4	Beri Beri	...	...	...	...	...	...	...	...	...	...	1	...	1
	5	Cerebro-Spinal Menin gitis	...	...	1	...	...	...	...	...	...	...	...	...	1
	7	Cholera	32	21	34	1	1	1	...	1	5	...	...	2	98
	10	Diphtheria	1	...	...	...	2	1	...	...	...	2	...	...	6
	11	Dysentery	239	194	219	169	152	132	130	243	208	173	157	151	2,167
	13	Enteric Fever	13	11	11	16	10	15	7	17	14	12	13	11	150
	14	Enterites	142	125	147	127	150	156	140	212	174	117	88	122	1,700
	15	Erysipelas	...	...	...	...	2	...	...	...	...	...	...	...	2
	20	Gonorrhoea	...	1	...	...	...	...	...	1	...	...	...	...	2
	21	Influenza	2	1	1	...	...	...	...	...	...	...	...	2	6
	22	Kala-Azar	2	3	4	8	5	5	...	2	1	1	5	2	38
	23	Leprosy	10	3	3	7	8	4	5	3	5	...	9	3	60
	25	Malarial Fever	113	113	114	96	76	79	75	106	110	105	88	129	1,204

Infective Diseases—*Contd.*		„ „ with enlargement of spleen.	12	14	7	12	9	7	8	6	10	11	8	10	114
		„ and Dysentery	1	1	2	3	...	...	2	3	4	4	...	1	21
		„ (d) cachexia	...	1	...	1	...	...	...	...	...	...	...	1	3
	26	Measles	..	1	3	6	...	1	7	1	...	...	1	1	21
	32	Pneumonia	125	69	73	91	85	92	59	114	75	95	89	71	1,038
	34	Pyrexia of uncertain origin	84	88	119	87	32	99	84	117	100	98	93	82	1,133
	35	Hydrophobia	...	1	1	1	...	...	3	...	...	...	...	1	7
	39	Septicaemia	2	5	1	4	3	1	3	2	1	1	3	3	29
		„ Puerperal	18	8	13	7	18	21	14	12	14	4	11	16	156
		„ Septic Fever	2	4	5	1	1	2	4	3	2	2	1	2	29
	41	Small pox	8	5	11	5	4	1	6	8	6	3	1	2	60
	42	Syphilis	1	1	5	2	1	1	3	1	4	2	6	4	31
	43	Tetanus	3	3	2	5	3	3	3	1	4	...	5	6	38
	44	Tuberculosis (Pulmonary)	147	147	105	111	109	86	106	99	98	101	117	135	1,361
		„ other than Pulmonary ...	24	18	17	9	15	9	15	20	13	14	11	12	177
	47	Whooping Cough	8	8	16	15	21	18	14	14	14	10	7	5	150
		Intoxication.													
	50	Alcholism	...	...		...	1	...	...	...	...	...	...	...	1

Annual Form No. XX—Showing a cemplete classification of diseases arranged in the order adopted in the Nomenclature of Diseases—(*Contd.*)

	No. in the Nomenclature of Diseases.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
		General Diseases.													
General Diseases.	61	Anaemia	25	24	35	16	16	16	15	26	13	12	21	7	226
	63	,, Pernicious	...	1	1	1	...	...	...	1	1	5	...	1	11
		,, and Dropsy	3	4	2	3	4	3	4	3	2	2	3	5	38
	64	Chlorosis	...	...	...	...	1	.	...	...	...	...	...	...	1
	66	Diabetes	1	2	2	1	4	4	2	2	...	1	1	...	20
		Diabetic Carbuncle	1	4	2	3	3	15	9	2	3	1	2	2	47
		,, Coma	...	...	1	...	1	2	1	...	1	1	...	...	7
		,, Gangrene	1	4	1	1	1	1	1	1	...	...	...	..	11
	76	Rickets	2	1	4	3	2	5	4	3	2	4	3	2	35
		New Growth Malignant.													
	80	Sarcoma	...	...	...	...	..	...	...	1	...	...	...	...	1
		Cancer	2	3	4	2	1	5	3	2	2	4	3	2	33

Certain morbid conditions incident to various parts—(*Contd.*)	82	Effects of Parasites.													
		Nemotoda.													
		(79) Ankylostomum	...	...	2	3	...	1	1	1	...	1	...	3	12
	85	Effects of Poison.													
		(4) Nitric Acid	...	...	...	...	..	...	...	...	...	...	1	...	1
		Vegetable Poisons.													
		(37) Opium	...	...	...	...	...	2	...	...	...	...	...	...	2
		Metals and their Salts.													
		(6) Copper	...	...	...	...	...	...	...	1	...	...	...	...	1
		Animal Poison.													
		(*a*) Snake bite	...	...	...	...	1	...	...	...	...	...	...	...	1
		(*b*) Scorpion-Sting	...	...	...	1	...	...	...	1	1	1	...	...	4
		Diseases of the Spinal Cord and Membranes.													
Diseases of the Nervous system.		**Membranes.**													
	88	Meningitis	1	1	...	2	2	1	..	...	1	1	1	...	10
		Spinal Cord.													
	90	Myelitis	...	...	...	...	...	...	...	...	1	...	...	...	1

Annual Form XX.—Showing a complete classification of diseases arranged in the order adopted in the Nomenclature of Diseases—(*contd*).

	No. in the Nomenclature of Diseases.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December	Total.
Diseases of the Nervous system—(*Contd.*)		Diseases of Brain and its Membranes.													
		Brain.													
	101	Cerebral Haemorrhage	6	6	3	4	...	7	2	4	...	4	1	6	43
	109	Apoplexy	1	1	2	...	2	1	...	1	...	1	1	...	10
	110	Paralysis	10	8	3	3	2	4	4	...	2	3	1	8	48
		„ (a) Paraplegia	1	1	2	...	1	1	1	2	1	...	2	...	12
		„ (b) Hemiplegia	28	24	25	15	12	18	7	22	18	13	13	18	213
	123	Eclamsia (Convulsions)	172	163	110	128	146	120	162	136	112	136	116	185	1686
		„ (Puerperal)	1	8	3	1	1	3	5	...	2	2	4	1	31
	124	Epilepsy	6	2	3	1	1	1	4	3	2	...	2	1	26
	133	Hysteria	...	...	...	...	1	...	...	...	1	...	...	1	3
	143	Neuresthema	...	...	...	...	...	1	...	...	...	1	...	...	2
		II Disorders of Function.													
	145	Mania	...	...	...	...	...	...	...	1	...	...	...	...	1

		Diseases of the Heart.													
		Endocardium.													
Diseases of the circulatory system.	292	Endocarditis	...	...	1	...	1	...	...	1	...	...	...	1	4
	293	Valvular Diseases	22	13	13	15	14	8	4	11	7	6	9	8	130
		Cardiac Failure	4	1	4	2	2	1	..	1	...	...	4	4	23
		Cardic Dropsy	7	5	4	5	2	5	4	2	2	7	1	...	44
		Diseases of the Heart (not specified) ...	28	15	17	22	16	13	9	14	13	15	11	8	181
	294	Myocarditis	4	3	4	2	6	2	5	3	6	6	2	7	50
	298	Dilatation of the Heart		...	...	...	...	...	1	...	...	1	...	...	2
		Diseases of the Respiratory System (not strictly local).													
Diseases of the Respiratory System.	338	Asthma	12	9	12	5	8	5	12	2	4	5	7	7	88
		Diseases of the Trachea and Bronchi.													
	404	Bronchitis (Acute)	30	21	16	14	13	16	14	20	19	13	16	15	207
		,, Chronic...	14	8	11	9	6	2	5	3	5	5	9	3	80
		Diseases of the Lung.													
	413	Broncho-Pneumonia	287	266	252	243	299	292	235	325	313	254	212	223	3,201
	422	Atelectacis	20	15	11	14	12	3	13	18	9	15	16	16	162
	425	Pleurisy	...	5	1	2	1	1	2	1	...	1	...	1	15

Annual Form XX.—Showing a complete classification of Diseases arranged in the order adopted in the Nomenclature of Diseases—(*contd.*)

	No. in the Nomenclature of Disea-es.	Cases of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Diseases o the Digestive system.		**Diseases of the Month.**													
	438	Canerumoris	1	...	...	...	...	...	..	...	...	...	...	1	2
	439	Necrosis	...	...	...	...	1	...	...	...	...	...	...	...	1
	440	Disoders of Dentition Diarlwea ...	...	...	...	3	1	1	4	2	1	2	...	3	17
		Diseases of the Pharynx and Ocsophagus.													
	487	Stricture	...	...	...	1	...	...	...	..	...	1	...	...	2
		Diseases of the Stomach.													
	489	Gastritis Acute	5	11	4	7	10	8	11	7	4	7	6	6	86
		" Chronic	6	4	2	8	9	10	4	12	5	3	1	6	70
	491	Gangrene	1	1	...	2	...	1	1	1	...	1	...	1	9
	499	Dyspepsia	...	1	1	1	...	2	3	...	...	1	...	...	9

Diseases of the Dygestive System.		**Diseases of the intestines.**													
	515	Inflammation													
		„ (2) Appendicitis ...	2	3	1	...	1	2	...	1	1	3	2	...	16
		„ Gastro-Enteritis ...	3	1	2	1	2	3	1	2	1	2	1	1	20
		„ (3) Colitis	...	1	1	...	...	...	...	...	1	...	1	..	4
	516	Duodenal ulcer	1	...	...	...	...	...	...	...	..	...	...	...	1
	528	Hernia	2	...	2	1	2	...	1	...	...	...	...	.	8
		„ Strangulated	1	...	2	2	...	1	...	3	1	...	2	5	17
	536	Obstruction of Bowels	11	5	4	5	1	2	1	5	4	6	6	2	52
		Diseases of the Rectum and Anus.													
	549	Fissure of Anus	...	1	...	...	...	1	...	2	...	..	.	...	4
	556	Piles	2	3	1	...	...	...	...	...	2	1	1	1	11
		Diseases of the Liver.													
	568	Hepatitis	2	1	1	...	2	1	1	...		2	...	1	12
		„ (*b*) Cirrhosis of Liver ...	30	18	20	18	13	21	18	14	15	13	15	16	211
		Enlargement of Liver	1	2	1	4	5	2	3	2	1	1	2	4	28
	575	Janndice	7	1	2	5	3	2	5	3	4	...	2	3	37
		Diseases of the Gall Bladder and Ducts.													
	581	Gall Stones	...	1	...	...	...	...	1	...	...	...	...	...	2

Annual Form XX—Showing a complete classification of Diseases arranged in the order adopted in the Nomenclature of Diseases—(*contd.*)

	No. in the Nomencla-true of Diseases.	Cuases of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November,	December.	Total,
Diseases of the Dygestive system-*ctd.*	588	Peritonitis	1	1	...	...	...	1	2	...	...	...	...	1	6
	590	Ascitis	1	5	2	1	2	4	1	3	4	2	2	3	30
Diseases of the Lymphatic System.		**Diseases of the spleen.**													
	592	Enlargement of the Spleen	1	1	...	...	1	6	1	...	3	1	1	1	16
		Diseases of the Lymphatic Vessels													
	616	Lymphangitis	...	...	1	...	...	...	...	1	...	...	...	1	3
	617	Filariasis	...	...	...	...	...	...	...	1	...	...	...	...	1
	618	Elephantiasis of the Scrotum	...	...	...	...	...	...	...	1	...	...	...	...	1
Urinary System.		**Diseases of the Kidney.**													
	651	Nephritis Acute	48	52	53	32	34	31	34	38	30	30	32	27	441
		Renal Dropsy	9	4	8	4	10	5	3	6	5	9	8	3	74
	652	Bright's Diseases	14	9	8	15	10	8	5	10	12	12	11	3	117

		Diseases of the Bladder.													
Urinary System—*contd.*	676	Cystitis	...	...	...	...	1	...	...	...	...	...	...	...	1
	678	Ulceration of the Bladder	...	1	...	...	...	...		...	...	...	...	...	1
	689	Retention of Urine	...	...	1	1	...	1	...	...	1	...	1	1	6
		Urinary Disoders.													
	692	Suppression of Urine	...	1	...	...	...	1	...	...	...	1	...	1	4
	697	Albuminuria	...	...	...	1	...	...	...	...	...	...	...	...	1
Diseases of the Generative System.		**Diseases of the Male organs of Generation.**													
		Diseases of Urethra													
	712	Stricture of Urethra	1	...	1	...	1	...	1	1	...	2	1	...	8
	715	Extravasation of Urine	...	1	...	1	...	...	...	...	...	...	...	...	2
		Diseases of the Scrotum.													
	741	Cellulitis Scrotum	...	...	...	...	...	...	...	2	...	...	...	...	2
	742	Sloughing Scrotum	...	...	...	...	...	...	...	...	...	...	...	1	1
		Diseases of the Female organs of Generation.													
		Diseases of Uterus including Cervix.													
	797	Rupture Uterus	1	...	...	...	...	...	...	...	1	...	...	1	3
Affections connected with Parturition.		Affections connected with Parturition													
	842	Haemorrhage	...	1	...	...	1	...	1	...	2	...	...	1	6
	848	Retention of the Placenta	...	...	...	1	...	...	...	...	...	...	...	1	2
	850	Asphyscia of child	2	2	2	1	7	3	2	2	2	...	7	2	32

Annual Form XX—Showing a complete classification of Diseases arranged in the order adopted in the Nomenclature of Diseases—(*contd.*)

	No. in the Nomenclature of Diseases.	Cases of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Affections connected with parturition.—(*Contd.*)	852	Premature Birth	137	107	93	85	98	85	110	113	104	107	127	127	1,293
		Difficult Labour	...	...	...	...	...	...	...	1	...	1	1	...	4
Affections consequent on parturition.		Affections Consequent on Parturition.													
	853	Post-Partum Haemorrhage	1	1	...	2	3	1	2	...	2	1	2	...	15
	870	Shock after Delivery	1	...	1	1	...	2	...	1	...	...	...	...	6
		Diseases of the connective Tissue.													
	952	Cellulitis	...	...	1	...	...	1	...	...	...	...	...	...	2
		Diseases of the Skin.													
	966	Carbuncle	...	...	...	1	2	...	...	1	...	...	...	...	4
	968	Bed Sore	...	1	...	...	...	...	...	...	...	...	...	...	1
		General Injuries.													
	1025	Effects of heat (a) Burns and Scalds ...	5	4	3	3	1	1	...	...	4	...	4	6	31
		(c) Sun-stroke	...	...	1	...	...	2	...	1	...	...	...	...	4

General Injuries.	1030	Suffocation—													
		„ By drowning accident ...	6	5	8	9	7	12	1	5	6	2	4	7	72
		„ Hanging suicide ...	3	1	2	1	...	1	1	3	2	1	...	1	16
	1033	Shock—													
		„ Train accident	...	...	...	...	...	1	1	...	...	...	...	...	2
		„ Motor do. ..	...	...	1	...	...	...	1	...	1	...	...	...	3
		Local Injuries.													
		Injuries of the Head													
Local Injuries.	1092	Fracture of the Skull	1	1	1	...	1	...	1	2	2	...	...	3	12
		Injuries of the Chest.													
		Injuries of the Lower Extremeties.													
	1127	Fracture Femur	...	...	...	...	...	...	...	...	1	...	1	...	2
	1145	Fracture of Ribs	...	3	...	...	...	...	...	...	1	...	1	1	6
	1156	Multiple Injuries	...	1	1	2	4	1	4	1	3	...	...	...	17
		Ill-defined and non-specified causes.													
		Debility	165	122	114	98	82	92	98	105	128	89	98	104	1295
		Old age	362	299	302	213	230	165	176	277	259	268	272	239	3062
		Natural Causes	2	1	3	2	1	4	3	2	1	2	2	1	24

TABLE A.

Comparative statement of deaths from some of the principal diseases during the past 12 years.

Year.	Births.		Deaths.		Small-pox.		Malaria.		Other Fevers.		Other Infectious diseases.		Plague.		Diarrhoea and Dysentery.		Respiratory Diseases.		Infantile mortality under 1 year.		Deaths of children between 1 and 5 years.		Still-Births.
	No. of Births registered exclusive of still-births.	Birth rate.	No. of Deaths registered exclusive of still-births.	Death rate.	Deaths.	Death rate.	Deaths.	Death rate.	Deaths.	Death rate.	Deaths.	Death rate.	Deaths.	Death rate.	Deaths.	Death rate.	Deaths.	Death rate.	Deaths.	Death rate.	Deaths.	Death rate.	Deaths.
1915	18,331	35·3	18,688	36·0	92	0·2	1,686	3·3	644	1·2	555	1·1	...	...	4,208	8·1	3,062	5·9	3,244	286·1	2,748	62·6	650
1916	21,675	41·8	17,872	34·5	476	0·9	753	1·5	528	1·0	443	0·9	11	0·02	3,664	7·1	3,727	7·2	5,746	265·1	2,742	62·5	975
1917	23,296	44·9	19,917	38·4	195	0·4	859	1·7	675	1·1	654	1·3	6	0·01	4,131	7.9	4,360	8·4	6,460	277·3	2,945	67·1	1,077
1918	19,897	38·4	31,262	60·3	272	0·5	881	1·7	4,837	9·3	542	1·0	22	0·04	5,533	10·7	7·006	13·5	7,068	355·2	4,914	112·0	834
1919	18,936	36·5	27,187	52·4	611	1·2	736	1·2	3,574	5·0	1,288	2·5	14	0·03	5,835	11·3	5,148	9·9	6,230	329·0	4,595	104·7	837
1920	21,396	41·3	21,418	41·3	109	0·2	560	1·1	1,780	3·4	1,995	3·8	8	0·02	4,671	9·0	4,428	8·5	5,976	279·8	3,654	83·3	1,172
1921	19,187	36·4	20,268	38·5	180	0·3	652	1·2	1,475	2·8	708	1·3	3	0·006	4,149	7·9	4,467	8·5	5,408	281·9	3,273	79·9	1,136
1922	21,650	41·1	22,475	42·7	121	2·1	763	1·4	1,325	2·5	612	1·2	1	0·002	4,16[illegible]	7·9	4,911	9·3	6,669	308·0	4,113	100·4	1,274
1923	22,975	43·6	19,933	37·9	151	0·3	783	1·5	769	1·5	363	0·7	1	0·002	3,778	7·2	4,610	8·7	5,837	254·0	3,272	79·9	1,312
1924	23,275	44·2	21,960	41·7	197	0·4	971	1·8	681	1·3	982	1·9	...	..	3,700	7·0	5,598	1·6	6,148	264·1	3,810	93·0	1,274
1925	28,070	43·6	25,000	47·3	763	1·4	1,298	2·5	1,039	2·0	682	1·3	...	...	4,031	7·6	6,416	12·3	6 431	278·8	4,656	112·9	1,335
1926	22,000	41·6	23,776	45·0	60	0·1	1,342	2·6	1,343	2·7	565	1·1	...	...	3,867	7·3	6,470	12·2	6,145	279·3	4,120	100·0	1,105

TABLE B.

Rainfall.

Years.	1st Quarter. January to March.	2nd Quarter. April to June.	3rd Quarter. July to September.	4th Quarter. October to December.	Total.
	Inches.	Inches.	Inches.	Inches.	Inches.
1921	5·46	2·64	18·18	28·15	54·43
1922	3·42	2·48	8·92	50.87	65·69
1923	5·10	1·99	8·16	22·08	37·33
1924	2·50	3·45	17 87	21·80	45·62
1925	4·19	4.33	11·15	47.17	66·84
1926	1·11	0·60	9·05	20·66	31·42

TABLE C.

Table of Births, Deaths and Infantile Death rate for the different races in the city for 1925 and 1926.

Race or Caste.	Population according to the census of 1921.	1925.						1926.					
		Total No. of Births.	Birth rate.	Total No. of Deaths.	Death rate.	Infantile Deaths.	Infantile Death rate.	Total No. of Births.	Birth rate.	Total No. of Deaths.	Death rate.	Infantile Deaths.	Infantile Death rate.
European	2,942	69	23·5	40	13·6	4	58·0	87	29·6	57	19·4	5	57·5
Anglo-Indian	9,002	373	41·4	275	30 5	59	158·2	326	36·2	303	33·7	62	190·2
Indian Christians	32,216	1,208	37·5	1,030	32·0	271	224·3	1,187	36·8	1,068	33·2	206	173·5
Hindus	429,155	18,811	43·8	20,450	47·7	5,350	284·4	17,851	41·6	19,552	45·6	5,160	289·1
Mahomedans	53,586	3,606	48·6	2,198	59·7	747	286·5	2,547	47 5	2,794	52·1	712	279 5
Others	1,890	3	1·6	7	3·7	...	...	2	1·1	2	1·1	...	...
Total ...	528,791	23,070	43·6	25,000	47·3	6,431	278·8	22,000	41·6	23,776	45·0	6,145	279·3

TABLE D.

Table of Birth and Death Rates of Principal Sub-Divisions of the Hindu Community for 1925 and 1926.

Names of Communities.	Population.	1925.				1926.			
		Total Births.	Birth. rates.	Total Deaths.	Death rates.	Total Births.	Birth rates.	Total Deaths.	Death rates.
Brahmins ...	48,223	1,290	26·75	1,266	26·3	1,415	29·3	1,250	25·9
Chetties ...	36,366	1,080	29·70	1,356	37·3	1,150	31·6	1,221	33 6
Vellalah or Mudaliar ...	69,768	2,435	34·90	2,982	42·7	2,822	40·4	2,761	39 6
Balijah or Naidu ...	49,976	1,473	29·47	2,048	43·0	1,818	36·4	1,531	30·4
Vanniah or Naicker ...	50,366	2,660	52·81	2,496	49·6	2,629	52·2	2,885	57 3
Adi-Dravida ...	58,751	2,537	43·18	3,033	51·6	2,929	49·9	2,782	47·3
Patnavar ...	10,456	502	48·01	466	44·6	632	65·2	640	61·2
Yadaval or Idayar ...	15,290	597	39·05	755	49·4	522	34·1	612	40·0
Viswa Karma Brahmin or Kammalar.	13,830	533	38·68	678	49·0	667	48 6	570	41·2

TABLE E.

Table of Births, Deaths and Infantile Death rates by months for 1925 and 1926.

Months.	1925.						1926.					
	Total No. of Births.	Birth rates.	Total No. of Deaths.	Death rates.	Infantile Deaths.	Infantile Death rates on 1,000 Live Births.	Total No. of Births.	Birth rates.	Total No. of Deaths.	Death rates.	Infantile Deaths.	Infantile Death rates on 1,000 Live Births.
January	1,649	37·6	2,121	48·1	507	307·5	1,722	39·1	2,514	57·1	572	332·2
February	1,389	31·6	1,930	44·0	485	349 2	1,409	32·0	2,142	48 6	505	358·4
March	1,834	41·8	2,057	46·8	527	287·4	1,709	38·8	2,116	48·0	485	283·8
April	1,932	44 0	2,138	48·7	562	290·9	1,750	39.7	1,837	41·7	452	258·3
May	1,979	45·1	2,142	48·8	518	261 7	1,862	42 3	1,886	42·8	538	288·9
June	1,790	40·8	1,743	39·7	389	228·2	1,779	40·4	1,778	40·3	548	308·0
July	1,908	43 3	1,712	38·9	456	239·0	1,980	44·7	1,719	39·0	506	269·1
August	2,182	49·5	2,092	47·5	584	267·6	1,976	44·8	2,231	50·6	622	314·8
September	2,248	51·0	1,980	44·9	525	233·5	1,884	42·7	2,020	45·8	485	257·4
October	2,136	48·5	2,040	46·3	566	250 0	1,918	43·5	1,847	41·9	471	245·6
November	2,042	46·5	2,163	49·1	636	311·5	2,003	45·5	1,791	40·6	454	226 7
December	1,981	44·9	2,882	65·4	676	341·4	2,008	5·6	1,895	45·4	507	253·2
Total ...	23,070	43·6	25,000	47·3	6,431	278 8	22,000	41·6	23,776	45·0	6,145	279·3

TABLE F.

Ratio of deaths among children under one year per 1000 live births registered in each division for 1925 and 1926.

Divisions.	1925.		1926	
	Infantile Mortality.	Infantile Death rate.	Infantile Mortality.	Infantile Death rate.
1 ...	278	293·3	257	330·3
2 ...	295	277·7	273	271·6
3 ...	357	288·4	337	353·2
4 ...	204	256·6	260	323·3
5 ...	90	370·7	87	379·9
6 ...	111	361·6	88	295·3
7 ...	136	318·5	109	295·3
8 ...	53	438·0	52	358·6
9 ...	195	303·7	179	281·8
10 ...	231	381·8	201	333·3
11 ...	59	359·8	49	304·3
12 ...	220	317·9	219	323·4
13 ...	172	301·8	177	309·4
14 ...	25	284·1	33	388·2
15 ...	178	377·9	185	376·7
16 ...	378	266·2	392	271·8
17 ...	348	344·9	310	284·9
18 ...	244	251·0	220	248·5
19 ...	226	258·6	231	267·6
20 ...	289	231·8	286	238·9
21 ...	198	274·6	177	235·6
22 ...	218	259·3	174	211·6
23 ...	298	258·2	313	306·8
24 ...	328	236·1	327	251·7
25 ...	129	162·5	135	204·2
26 ...	175	247·9	178	255·7
27 ...	223	272·3	218	288·3
28 ...	295	282·6	265	254·3
29 ...	273	267·1	231	241·3
30 ...	205	313·0	182	254·5
Total ...	6,431	278·8	6,145	279·3

TABLE G.

Table of Infantile Mortality by months in the year 1926.

Months.	Small-pox	Measles.	Malaria.	Other fevers.	Diarrhoea and Dysentery.	Premature Birth.	Debility.	Nervous system.	Respiratory system.	All other causes.	Total for 1926.			Total of all causes for 1925.
											Males.	Females.	Total.	
January ...	...	...	1	15	72	137	57	65	176	49	336	236	572	507
February ...	1	...	1	14	70	107	61	48	163	40	289	216	505	485
March ...	1	2	1	28	68	93	57	58	149	28	252	233	485	527
April ...	...	...	3	19	67	85	33	44	163	38	226	226	452	562
May ...	...	...	1	17	86	98	41	78	184	33	282	256	538	518
June ...	...	...	1	30	87	85	46	73	186	40	296	252	548	389
July ...	1	...	2	14	76	110	47	43	189	24	268	238	506	456
August ...	1	...	4	9	132	113	47	81	202	33	323	299	622	584
September ...	1	...	1	8	84	104	52	62	154	19	254	231	485	525
October ...	...	...	2	17	50	107	41	53	173	28	221	250	471	566
November ...	...	1	2	7	44	127	42	51	147	33	242	212	454	636
December ...	...	...	...	11	58	127	57	67	159	28	280	227	507	676
Total ...	5	3	19	189	894	1,293	581	723	2,045	393	3,269	2,876	6145	6431

TABLE H.

Table of Percentage of Infantile Deaths from principal causes in the year 1926.

Age Periods.	Smallpox.		Measles.		Malaria.		Other Fevers.		Diarrhoea and Dysentery.		Premature Births.		Debility.		Nervous System.		Respiratory System.		All other causes.		Total.	
	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.
Under 7 days ..	...	...	...	...	...	...	7	0·50	5	0·35	1,030	72·18	89	6·24	91	6·31	115	8·05	90	6·31	1,427	23·25
7 days and under 1 month ...	...	...	...	...	1	0·14	9	1·22	37	5·00	226	30·54	183	24·73	122	16·49	113	15·27	49	6·62	740	12·04
1 month and under 4 months ...	1	0·09	...	...	...	...	47	4·03	187	16·04	33	2·83	196	16·81	140	12·01	502	43·05	60	5·10	1,166	18·97
4 months and under 7 months...	1	0·11	1	0·11	2	0·23	46	4·88	240	25·48	...	...	55	5·84	65	6·90	485	51·49	47	4·99	942	15·33
7 months and under 10 months.	3	0·27	2	0·18	11	0·98	52	4·61	267	23·69	...	...	40	3·55	173	15·35	489	43·30	90	7·98	1,127	18·34
10 months and under 1 year ...	...	...	...	...	5	0·67	28	3·77	158	21·24	4	0·54	18	2·42	132	17·77	341	45·90	57	7·67	743	12·09
Total ...	5	0·08	3	0·05	19	0·31	189	3·08	894	14·55	1,293	21·04	581	9·45	723	11·76	2045	33·29	393	6·40	6,147	279·3

Statement No. 1.—Showing the number of Births (Divisional and Hospital) verified during the calendar year 1926 and the number of vaccination of infants under one year of age.

Divisions.	Total births excluding still births.		Still Births.		Deaths under one year.		Number of infants surviving.		Number of infants vaccinated under one year.		Percentage of Vaccination to births registered.	
	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.
1	636	235	19	22	174	43	462	192	291	106	45·8	40·9
2	701	338	18	59	160	45	541	293	358	67	51·1	19·8
3	831	274	32	35	184	68	647	206	487	98	58·6	35·8
4	622	210	26	35	128	48	494	162	340	63	54·7	30·0
5	180	56	7	4	53	6	127	50	65	12	36·1	21·4
6	262	57	12	6	81	8	181	49	88	9	33·6	15·8
7	299	111	7	10	67	22	232	89	134	20	44·8	18·0
8	75	62	4	4	29	12	46	50	22	12	29·3	19·4
9	431	202	21	16	92	45	339	157	224	80	52·0	39·6
10	436	178	13	29	129	46	307	132	214	58	49·1	32·6
11	138	20	8	4	46	3	92	17	49	5	35·5	25·0
12	539	128	20	19	144	23	395	105	262	52	48·6	40·6
13	449	135	13	19	112	29	337	106	169	24	37·6	17·8
14	72	25	3	3	19	5	53	20	23	5	31·9	20·0
15	411	94	19	13	113	23	298	71	153	29	37·2	30·9
16	1146	273	64	18	263	44	883	229	578	70	50·4	25·6
17	957	206	34	19	215	51	742	155	519	51	54·2	24·8
18	710	222	24	12	126	32	584	190	372	81	52·4	35·5
19	499	354	12	18	111	52	388	302	212	89	42·5	25·1
20	562	670	11	76	115	85	447	585	341	202	60·7	30·1
21	556	197	14	13	112	41	444	156	298	71	53·6	36·0
22	603	257	22	11	119	40	484	217	321	64	53·2	24·9
23	797	328	20	29	165	45	632	283	457	104	57·3	31·4
24	1006	358	17	32	235	68	771	290	491	87	42·8	24·3
25	424	230	10	28	62	38	362	192	235	66	55·7	28·7
26	574	127	19	8	114	25	460	102	221	40	38·7	31·5
27	655	183	11	17	117	21	538	162	354	50	54·0	27·3
28	697	311	19	18	128	57	569	254	390	65	36·0	20·4
29	711	198	26	13	154	41	557	157	374	86	52·6	43·4
30	564	160	15	15	94	12	470	148	188	29	33·9	18·1
Total ...	16,543	6,199	550	605	3,661	1,078	12,882	5,121	8,230	1,795	49·7	29·0

Vaccination Statement No. II.—Showing the number of Births verified in 1926 and the number of Infants vaccinated under one year of age.

Year.	Total number of births excluding Still-births.	Number of children in column 2 who died before attaining the age of one year without being vaccinated.	Number of children in column 2 who left the city before attaining the age of one year without being vaccinated.	Number of children in column 2 who were available for vaccination (column 2 minus columns 3 and 4.)	Number of Children in column 5 who were vaccinated before they attained the age of one year	Percentage of column 6 to column 5.	Number of children in column 5 whose vaccination was postponed beyond one year of age for medical reasons.
1	2	3	4	5	6	7	8
1924 Divisional Cases ...	17,309	3,325	3,508	10,476	8,175	78·0	300
1924 Hospital ,, ...	5,912	874	1,138	3,900	1,636	42·2	91
1925 Divisional Cases ...	17,338	3,546	2,930	10,862	8,999	82·85	388
1925 Hospital ,, ...	5,884	953	1,100	4,931	1,750	35·49	139
1926 Divisional Cases ...	16,543	3,661	2,736	10,146	8,230	81·12	381
1926 Hospital ,, ...	6,199	1,078	1,198	3,923	1,795	45·76	128

Vaccination Statement No. III—Showing particulars of Vaccination during the Calendar year 1926.

Divisions.	Districts.	Population according to census of 1921.	Number of depots	Number of vaccinators.	Total No. of persons vaccinated. Males	Total No. of persons vaccinated. Females.	Total No. of persons vaccinated. Total.	Average No. of persons vaccinated by each Vaccinator.	Primary vaccination. Total. Males.	Primary vaccination. Total. Females.	Primary vaccination. Total. Total.	Primary vaccination. Successful. Under one year.	Primary vaccination. Successful. One year and under six.	Primary vaccination. Successful. Six years and above.	Primary vaccination. Successful. Total.	Primary vaccination. Unknown.	Re-Vaccination Total.	Re-Vaccination Successful.	Re-Vaccination Unknown.	Percentage of successful cases in which the results were unknown. Primary.	Percentage of successful cases in which the results were unknown. Re-vaccination.	Persons successfully vaccinated per 1000 of population.	Average annual No. of persons successfully vaccinated during the previous 5 years. Number.	Average annual No. of persons successfully vaccinated during the previous 5 years. Ratio per 1000 of population.	Average annual No. of deaths from small-pox during the previous 5 years. Number.	Average annual No. of deaths from small-pox during the previous 5 years. Ratio per 1000 of population.	Average cost of each successful vaccination.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1	Royapuram ...	20891	13	44	555	514	1069	708	403	448	851	537	305	6	848	1	218	43	42	99·8	24·4	42·7	576	27·6	27	1·3	Rs. 0-12-5.
2	Tondiarpet ...	16899			623	532	1155		485	477	962	701	256	2	959	1	193	42	49	99·8	29·0	59·2	882	52·2	35	2·1	
3	Washermanpet ...	23777			728	542	1270		531	520	1051	785	245	11	1041	1	219	66	81	99·1	48·5	46·6	874	36·8	56	2·4	
4	Korukupet ...	16640			609	487	1096		386	420	806	558	228	6	792	1	290	104	55	98·4	44·3	53·8	582	35·0	23	1·4	
5	Harbour ...	7288			257	99	356		135	94	229	142	84	...	226	2	127	29	73	99·5	53·7	35·0	270	37·0	10	1·4	
6	Muthialpet ...	15631			312	140	452		159	109	268	168	95	1	264	1	184	19	92	98·9	20·6	18·1	221	14·1	12	0·8	
7	Katchaleswaraupet ...	13055			436	254	690		183	194	377	259	106	2	367	6	313	54	104	98·9	26·0	32·2	367	28·1	12	0·9	
8	Kothawal Bazaar ...	5117			107	53	160		71	53	124	64	57	...	121	1	36	12	15	98·4	57·1	26·0	196	38·3	7	1·4	
9	Ammen Kovil ...	15820			595	309	904		273	263	536	441	93	2	536	...	368	45	29	100·0	13·5	36·7	379	24·0	20	1·3	
10	Seven Wells ...	19628			515	337	852		250	261	511	411	94	4	509	...	341	41	63	99·6	14·7	28·0	430	21·9	17	0·8	
11	Sowcarpet ..	7460			273	145	418		111	138	249	187	60	1	248	1	179	47	13	100·0	28·3	39·5	126	16·9	5	0·7	
12	Peddunaickenpet ...	17575			652	410	1062		314	357	671	492	174	2	668	2	391	80	22	99·9	21·7	42·5	534	30·4	13	0·7	
13	Trevelyan Basin ...	17272			391	238	629		285	229	514	375	139	...	514	...	115	15	61	100·0	27·8	30·7	546	31·6	14	0·8	
14	Esplanade ...	2664			502	84	586		65	63	128	92	35	...	127	...	458	56	357	99·2	55·4	69·0	90	33·8	3	1·1	
15	Park Town ...	17544			482	352	834		286	306	592	411	178	...	589	3	242	38	172	100·0	54·3	35·7	578	32·9	16	0·9	
16	Perambur ...	29459			1321	775	2096		757	634	1391	1113	275	...	1388	...	705	91	39	99·7	13·7	50·2	837	28·4	18	0·6	
17	Choolai ...	24021			851	603	1454		575	561	1136	956	178	1	1135	...	318	46	216	99·9	45·1	49·1	885	36·8	15	0·6	
18	Puraswalkam ...	20656			699	461	1160		442	418	860	639	201	20	860	...	320	59	124	100·0	30·1	44·5	593	28·7	14	0·6	
19	Vepery ...	19299			383	294	677		287	275	562	506	45	...	551	4	115	47	11	98·4	45·2	30·9	646	33·5	13	0·7	
20	Egmore ...	25627			533	429	962		426	416	842	740	91	3	834	3	120	10	88	99·4	31·3	32·9	789	30·8	11	0·4	
21	Kilpauk ...	18540			424	319	743		264	293	557	528	28	...	556	...	186	6	12	99·9	3·4	30·3	540	29·1	11	0·6	
22	Nungambakam ...	21644			534	453	987		405	403	808	653	147	...	800	6	179	35	86	99·7	37·6	38·5	628	29·0	11	0·5	
23	Chintadripet ...	23790			636	514	1150		460	483	943	846	88	2	936	1	207	13	159	99·4	27·1	35·6	955	40·1	16	0·7	
24	Tiruvatteswaranpet.	24195			472	387	859		383	372	755	597	156	..	753	...	104	71	1	99·7	69·0	34·1	711	29·4	20	0·8	
25	Chepauk ...	13277			297	268	565		263	261	524	379	104	6	489	23	41	5	23	97·6	27·7	39·9	468	35·2	7	0·5	
26	Triplicane ...	16506			298	247	545		239	238	477	361	86	1	448	10	68	9	47	96·0	42·9	27·7	489	21·0	14	0·8	
27	Amir Mahal ...	15254			380	281	664		305	275	580	489	87	..	576	...	84	40	1	99·3	48·2	40·4	527	34·5	13	0·9	
28	Mirsahibpet ...	18631			470	394	864		419	386	805	678	110	...	788	...	59	12	...	97·9	20·4	42·9	666	35·7	21	1·1	
29	Royapettah ...	22773			640	407	1047		428	359	787	664	122	...	786	...	260	100	...	99·9	34·7	45·9	821	36·1	11	0·5	
30	Mylapore ...	17858			273	202	475		237	197	434	361	63	...	424	9	41	5	4	99·9	13·5	24·0	465	26·0	20	1·1	
	Total ...	528791	13	44	15247	10564	25811		9,826	9,504	19330	15,133	3,930	70	19,133	76	6,481	1,240	2,039	99·4	27·9	38·5	1,6675	31·5	485	0·9	

CORPORATION SCHOOLS, MADRAS.

STATEMENT I.—1926.

No.	Defects.	Boys.									Girls.			Rema ks.
		Entrants.			Regulars.			Total Defective Entrants and Regulars 1926.	Entrants and Re͜gulars.		No. Defective.	Percentage.		
		No. Defective.	Percentage.		No. Defective.	Percentage.			Percentage.					
			1926.	1925.		1926.	1925.		1926.	1925.		1926.	1925.	
1	Malnutrition ...	536	17·05	24·16	193	16·64	19·64	729	16·93	21·90	379	15·33	11·32	
2	Dirty Head, Body and Nails ...	907	28·85	40·24	255	21·98	25·37	1162	26·49	32·87	996	40·20	42·72	
3	Teeth and Mouth ...	934	29·71	36·00	360	31·04	28·08	1294	30·58	32·04	1193	48·20	48·70	
4	Nose and Throat ...	1383	43·98	48·28	501	43·19	34·94	1884	43·74	41·61	423	17·10	19·81	
5	Eye Disease ...	141	4·48	6·77	51	4·39	6·93	192	4·46	6·85	221	8·91	3·01	
6	Vision ...	49	1·56	1·47	22	1·89	1·62	71	1·65	1·55	11	0·44	0·34	
7	Ear Disease ...	29	0·92	1·97	10	0·86	2·45	39	0·91	2·21	174	7·03	1·12	
8	Hearing ...	5	0·16	0·25	3	0·26	0·46	8	0·18	0·35	4	0·16	0·04	
9	Speech ...	21	0·67	0·86	10	0·86	1·20	31	0·72	1·03	9	0·36	0·21	
10	Circulatory System ...	94	2·99	4·40	17	1·47	5·04	111	2·58	4·72	277	11·20	7·66	
11	Tuberculosis ...	33	1·05	1·47	6	0·52	1.62	39	0·91	1·55	14	0·56	0·38	
12	Respiratory System ...	162	5·15	11·53	58	5·00	10·07	220	5·11	11·30	164	6·63	6·07	
13	Abdominal organs ...	77	2·45	8·06	18	1·55	4·34	95	2 21	6·20	27	1·09	0·95	
14	Bones and Joints ...	67	2·13	3·59	27	2·33	4·02	94	2·18	4·31	55	2·22	1·76	
15	Nervous and Psychic Systems...	15	0·48	1·26	4	0·34	0·88	19	0·44	1·07	14	0·56	0·34	
16	Infectious and Contagious Diseases ...	246	7·82	8·85	88	7·59	8·78	334	7·76	8·82	161	6·51	2·50	
17	Other Diseases or Defects ...	161	5·12	6·47	56	4·83	7·12	217	5·04	6·79	747	30·20	8·70	
18	Vaccination ...	36	1·14	1·47	7	0·60	0·88	43	0·99	1·17	40	1·21	...	
19	Deformities ...	19	0·60	0·40	6	0·52	1·02	25	0·58	0·71	13	0·53	0·21	

STATEMENT II—1926.

Height and Weight Table.

Age of the Pupil (completed age).	Boys.		Girls.	
	Average Height in inches of boys examined.	Average Weight in Pounds of boys examined.	Average Height in inches of girls examined.	Average Weight in Pounds of girls examined.
4 Years	30·24	29·52	35·48	30·62
5 ,, ...	32·46	30·04	37·72	32·87
6 ,, ...	33·64	32·23	40·64	34·72
7 ,, ...	36·55	36·67	43·12	38·24
8 ,, ...	42·64	38·36	43·72	40·07
9 ,, ...	44·68	40·42	45·68	42·78
10 ,, ...	46·23	44·49	49·74	45·64
11 ,, ...	48·62	49·32	53·64	50·28
12 ,, ...	50·24	52·63	55·15	54·31
13 ,, ...	52·42	56·77	56·32	59·86
14 ,, ...	54·37	68·24	57·48	67·36
15 ,, ...	58·42	78·92	59·64	82·45
16 ,, ...	62·39	92·27	62·32	89·24

Appendix to Statement I.

Group	No. Examined.		No. Defective.		Percentage.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
Entrants	3144	1498	1996	1273	63·48	84·90
Regulars	1160	974	653	653	56·29	67·00
Total ...	4304	2472	2649	1926	61·31	77·70

Treatment Table.

Corporation Schools.	Referred to Corporation Dispensaries.	Referred to General Hospital.	Referred to Opthalmic Hospital.	Referred to Tuberculosis Institute.	No. of Parents met.	No. of Houses Visited.	No. of Reinspections.
Boys	2309	119	101	24	1348	1145	62
Girls	1480	23	34	9	371	122	43
Total ...	3789	142	135	33	1719	1267	105

Teeth and Mouth Table.

No.	Defects.	Entrants.			Regulars.		
		Number Defective.	Number referred to Corporation Dispensaries.	No. referred to General Hospital.	Number Defective.	No. referred to Corporation Dispensaries.	No. referred to General Hospital.
1	Dirty Teeth	409	...	19	212	...	11
2	Dental Caries ...	258	207	5	108	68	4
3	Stomatitis	264	264	...	85	85	...
4	Oral Sepsis	6	2	4	1	...	1
5	Other conditions ...	6	6	...	2	2	...

Nose and Throat Table.

Defects of	Details.	Entrants.			Regulars.		
		No. found defective.	No. referred to Corporation Dispensaries.	No. referred to General Hospital.	No. found defective.	No. referred to Corporation Dispensaries.	No. referred to General Hospital.
Nose ...	Rhinitis ...	30	27	3	7	7	...
	Nasal Polypus ...	1	...	1	...	...	...
	En : Tonsils ...	968	934	34	334	323	11
	Inflamed Tonsils ...	5	5	...	2	2	...
Throat ...	Granular Pharynx ...	12	12	...	6	6	...
	Adenoid Growth ...	4	...	4	2	...	2
	Enlarged Cervical Glands ...	908	899	9	363	360	3
	Other Conditions ...	4	4	...	...	...	...

Eye Table.

No.	Defects.	Entrants.			Regulars.		
		Number Defective.	Number referred to Corporation Dispensaries.	Number referred to General Hospital.	Number Defective.	Number referred to Corporation Dispensaries.	Number referred to General Hospital.
	Conjunctivitis	32	31	1	10	9	1
	Blepharitis	7	7	...	2	2	...
	Iritis	1	...	1	...	...	...
	Corneal Opacity	12	...	12	5	...	5
	Granular Lids	27	...	27	8	...	8
	Xerosis	37	...	...	16	...	...
	Stye	2	2	...	4	4	...
	Ptosis	4	...	4	...	...	...
	Squint	21	...	19	7	...	7
	Sub-Conjunctival Haemorrhage.	1	...	1	...	...	...
	Lacchrymation	1	...	1	...	...	...
	Other Conditions	...	...	...	...	...	...
	Vision	49	...	49	22	...	22

OTHER DISEASES AND DEFECTS.

Defects.	Entrants.			Regulars.		
	Number Defective	No. referred to Corporation Dispensaries	No. referred to General Hospital.	Number Defective.	No. referred to Corporation Dispensaries.	No. referred to General Hospital.
Worms	34	31	3	24	23	1
Wounds	19	19	...	9	9	...
Ulcers	15	15	...	6	6	...
Boils	17	17	...	1	1	...
Undescended Testis	26	...	...	9	...	...
Phimosis	23	...	23	7	...	7
Tumours	2	...	2	...	...	...
Whitlow	1	1	...	...	...	...
Leucodermic Patches.	1	1	...	...	...	...
Appendicitis	1	...	1	...	...	...
Dysuria	1	1	...	...	...	...
Internal Piles	1	...	1	...	...	...
Keloid growths	1	...	1	1	...	1
Alopaecia	2	2	...	1	1	...
Other conditions	9	9	...	6	6	...

Details of other defects found by medical inspection of Corporation Elementary Schools.

Number	Defects.		Number Defective.	
	System or organs.	Details.	Entrants.	Regulars.
1	Ear.	1. Otorrhoea	19	4
		2. Otitis—(Media and Externus)	5	2
		3. Other Ear Diseases	7	3
		4. Defective Hearing	6	2
2	Heart and circulation.	1. Heart Disease Organic	7	3
		Heart Disease Functional	45	24
		2. Anaemia	27	11
3	Lungs.	1. Bronchitis (acute and chronic)	155	29
		2. Other Non Tuberculous Diseases Asthma	17	5
4	Tuberculosis.	1. Pulmonary—		
		(a) Definite	4	1
		(b) Suspected	25	5
		2. Non-Pulmonary—		
		(a) Glands	2	1
		(b) Spine	1	...
		(c) Hip	...	...
		(d) Bones and Joints	...	...
		(e) Skin	...	...
		(f) Other forms	...	...
5	Abdominal conditions.	1. Enlarged Spleen	16	5
		2. ,, Liver	3	...
		3 ,, Spleen and Liver	1	...
		4. Hydrocele	15	2
		5. Hernia—		
		(a) Inguinal	15	3
		(b) Umbilical	9	4
		(c) Femoral	...	...
		6. Stomach conditions as gastritis etc.	5	1
		7. Bowel conditions	3	...
		8. Other conditions	23	12
6	Bones and Joint diseases.	1. Bones—		
		(a) Fractures	...	...
		(b) Caries	3	...
		(c) Deformities	...	...
		(d) Diseases	...	...
		2 Joints—		
		(a) Dislocations and Sprains	5	...
		(b) Diseases	1	...
		(c) Deformities	5	3
		3. Rickets—		
		(a) General	2	...
		(b) Deformed chest	58	23
7	Nervous.	1. Organic	7	1
		2. Psychic	4	3
8	Psychic.	Mentally defective	5	1
9	Deformity.	General Deformity—		
		(a) Spinal Deformity	4	1
		(b) Supernumerary Fingers	2	...
		(c) Talipes Equinus	4	...
		(d) Shortened Limbs	6	...
		(e) Syndachilly	1	...
		(f) Harelip	...	2
		(g) Genital Deformity	1	...

CORPORATION OF MADRAS.

(RIPON BUILDINGS)

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of the City of Madras

FOR THE YEAR

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